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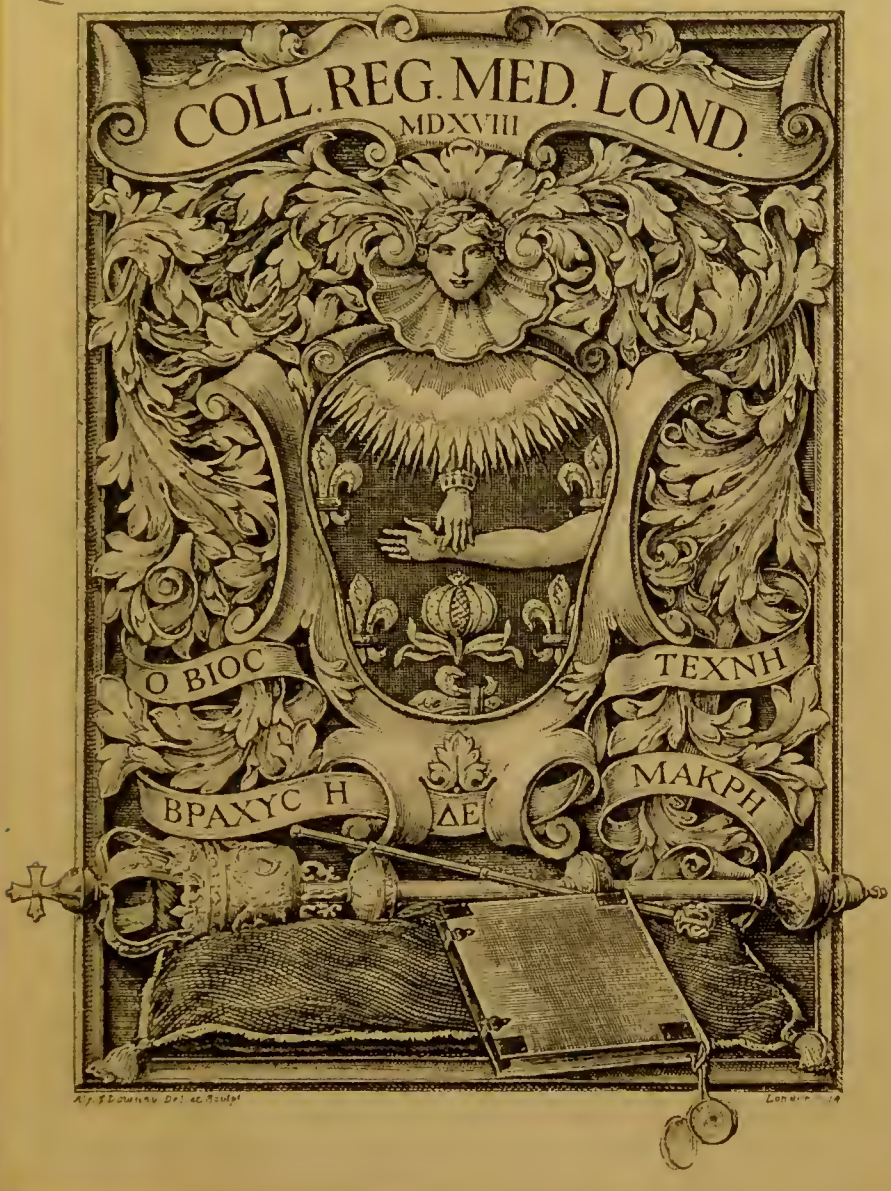

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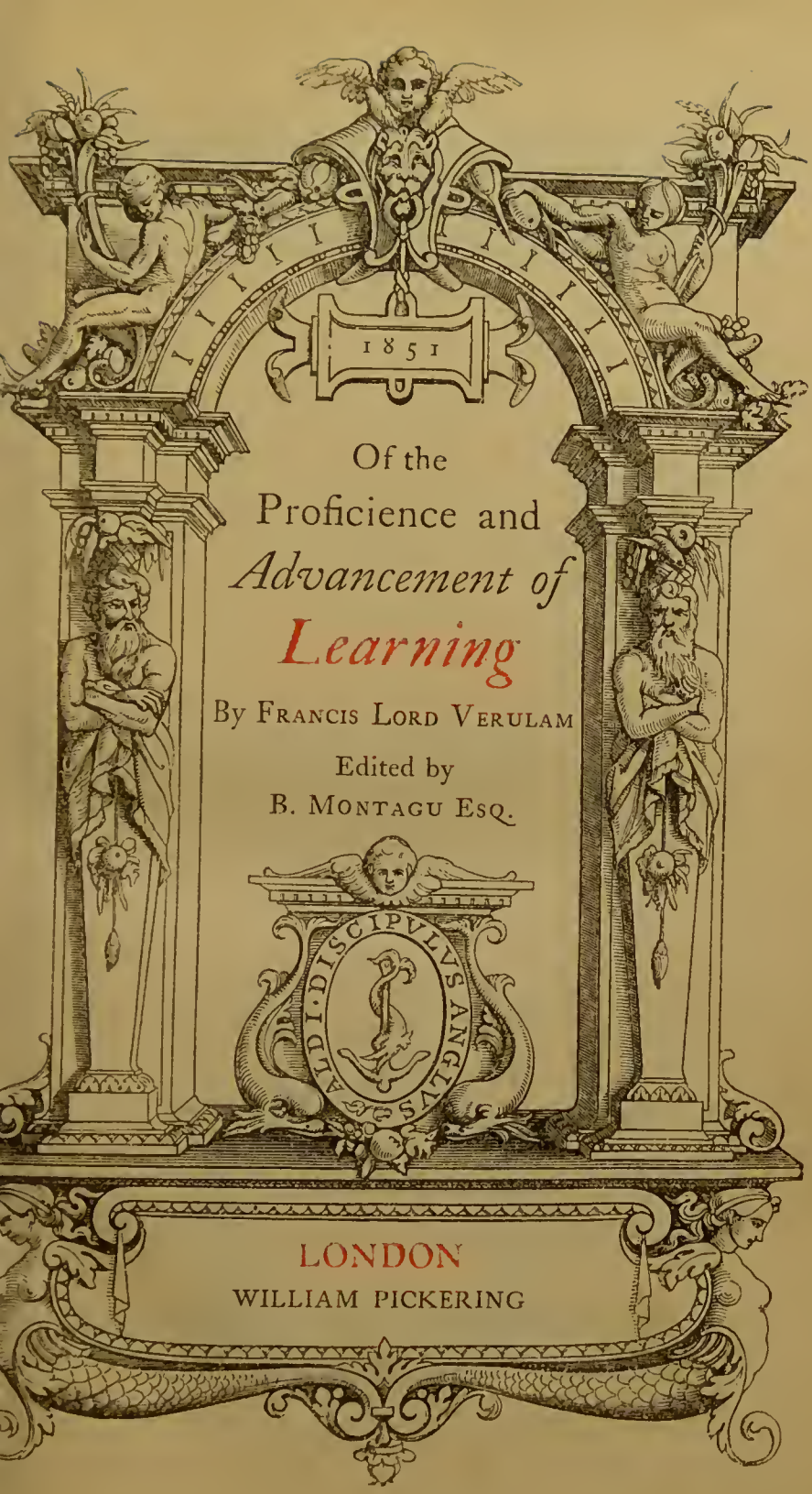

Of the Proficience and *Advancement of Learning*

By Francis Lord Verulam

Edited by

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PREFACE.

LORD BACON, in the midſt of his laborious occupations, publiſhed, in the year 1605, his celebrated work *The Advancement of Learning*, which profeſſes to be a ſurvey of the then exiſting Knowledge, with a deſignation of the parts of Science which were unexplored; the cultivated parts of the intellectual World and the deſarts; a finiſhed picture with an outline of what was untouched.

Within the outline is included the whole of Science. After having examined the objections to Learning;—the advantages of Learning;—the places of learning or Univerſities;—the books of Learning or Libraries, *the ſhrines where all the relics of the ancient Saints, full of true Virtue, and that without deluſion or impoſture, are preſerved and repoſed;*—after having thus cleared the way, and, as it were, *made ſilence to have the true nature of Learning better heard and underſtood*, he inveſtigates all Knowledge:

1ſt. Relating to the Memory, or Hiſtory.
2nd. Relating to the Imagination, or Poetry.

3rd. Relating to the Underſtanding, or Philoſophy.

Such is the outline: within it the work is minutely arranged, abounds with great felicity of expreſſion, and nervous language: but not contenting himſelf, by ſuch arrangement, with the mere exhibition of Truth, he adorned it with familiar, ſimple, and ſplendid imagery.

When ſpeaking of the error of common minds retiring from active life, he ſays, *Pythagoras, being aſked what he was, anſwered, that if Hiero were ever at the Olympic games, he knew the manner, that ſome came as merchants to utter their commodities, and ſome came to make good cheer, and ſome came to look on, and that he was one of them that came to look on; but men muſt know, that in this theatre of man's life, it is reſerved only for* GOD *and Angels to be lookers on.* So, when explaining the danger to which Intellect is expoſed of running out into ſenſuality on its retirement from active life, he ſays, in another work, *When I was chancellor I told Gondomar, the Spaniſh Ambaſſador, that I would willingly forbear the honour to get rid of the burthen; that I had always a deſire to lead a private life. Gondomar anſwered, that he would tell me a tale; My lord, there was once an old Rat that would needs leave the World; he acquainted the young Rats that he would retire into his hole, and ſpend his days in ſolitude, and commanded them to reſpect his philoſophical ſecluſion. They forbore two or three days; at laſt one, hardier than his fellows, ventured*

in to ſee how he did; he entered, and found him ſitting in the midſt of a rich parmeſan Cheeſe.

In ſuch familiar explanations did he indulge himſelf: it being his object not to inflate trifles into marvels, but to reduce marvels to plain things. Of theſe ſimple modes of illuſtrating truth it appears, from a volume of *Apothegms*, publiſhed in the decline of his life, and a recommendation of them, in this treatiſe, as a uſeful appendage to Hiſtory, that he had formed a collection.

When the ſubject required it, he, without departing from ſimplicity, ſelected images of a higher nature; as, when explaining how the Body acts upon the Mind, and anticipating the common ſenſeleſs obſervation, that ſuch inveſtigations are injurious to Religion, *Do not*, he ſays, *imagine that inquiries of this nature queſtion the immortality of the Soul, or derogate from its ſovereignty over the Body. The infant in its mother's womb partakes of the accidents of its mother, but is ſeparable in due ſeaſon.* So, too, when explaining that the body is decompoſed by the depredation of innate ſpirit and of ambient air, and that if the action of theſe cauſes can be prevented, the body will defy decompoſition: *Have you never*, he ſays, *ſeen a Fly in Amber, more beautifully entombed than an Egyptian monarch?* and, when ſpeaking of the reſemblance in the different parts of Nature, and calling upon his readers to obſerve that truths are general, he ſays, *Is not the delight of the quavering upon a ſtop in Muſic the ſame with the playing of light upon the Water,*

Splendet tremulo ſub lumine pontus.

Such are his beautiful and playful modes of familiarizing abſtruſe ſubjects: but to ſuch inſtances he did not confine himſelf. He was too well acquainted with our Nature, merely to explain Truth without occaſionally raiſing the mind by noble and lofty images to love it.

It muſt not be ſuppoſed that, becauſe he illuſtrated his thoughts, he was miſled by Imagination, which never had precedence, but always followed in the train of his Reaſon: or, becauſe he had recourſe to Arrangement, that he was enſlaved by Method, which he always diſliked, as impeding the progreſs of Knowledge. It is, therefore, his conſtant admonition, that a plain, unadorned ſtyle, in Aphoriſms, is the proper ſtyle for Philoſophy; and in Aphoriſms the *Novum Organum* and his tract on *Univerſal Juſtice* are compoſed. But, although this was his general opinion; although he was too well acquainted with what he terms the Idols of the Mind, to be diverted from Truth by the love of order; yet knowing the charms of Theory and Syſtem, and the neceſſity of adopting them to inſure a favourable reception for abſtruſe works, he did not reject theſe garlands, at once the ornament and fetters of Science. They may now, perhaps, be laid aſide, and the noble Temple which he raiſed may be deſtroyed; but its gorgeous magnificence will never be forgotten, and amidſt the ruins a noble Statue will be ſeen by every true worſhipper of beauty and of Knowledge.

To form a correct judgment of the merits of this treatiſe it is but juſtice to the author to remember, both the time when it was written and the perſons for whom it was compoſed, *length and ornament of ſpeech being fit for perſuaſion of Multitudes, although not for information of Kings.*

The work is divided into two books: the firſt conſiſting of his dedication to the King; — of his ſtatement of the objections to Learning, by Divines, by Politicians, and from the errors of learned men; — and of ſome of the advantages of Knowledge.

If, in compliance with the cuſtom of the times, or from an opinion that Wiſdom, although it ought not to ſtoop to perſons, ſhould ſubmit to occaſions, or from a morbid anxiety to accelerate the advancement of Knowledge, *Bacon* could delude himſelf by the ſuppoſition that his fulſome dedication to the King was conſiſtent either with the ſimplicity or dignity of Philoſophy, he muſt have forgotten what *Seneca* ſaid to *Nero*, *Suffer me to ſtay here a little longer with thee, not to flatter thine ear, for that is not my cuſtom, as I have always preferred to offend by Truth than to pleaſe by Flattery.* He muſt have forgotten that when *Æſop* ſaid to *Solon*, *Either we muſt not come to Princes, or we muſt ſeek to pleaſe and content them: Solon anſwered, Either we muſt not come to Princes at all, or we muſt ſpeak truly, and counſel them for the beſt.* He muſt have forgotten his own doctrine, that books ought to have no patrons but Truth and Reaſon, and he muſt alſo have forgotten his own nervous and beau-

tiful admonition, that *the honeſt and juſt bounds of obſervation by one perſon upon another extend no further but to underſtand him ſufficiently whereby not to give him offence; or whereby to be able to give him faithful counſel; or whereby to ſtand upon reaſonable guard and caution with reſpect to a man's ſelf: but to be ſpeculative into another man to the end to know how to work him, or wind him, or govern him, proceedeth from a heart that is double and cloven, and not entire and ingenuous, which as in friendſhip, it is want of integrity, ſo towards Princes or Superiors it is want of duty.*

If his work had been addreſſed to the Philoſophy of the country, inſtead of having confined his profeſſional objections to divines and politicians, he would have explained that, as our opinions always conſtitute our intellectual and often our worldly wealth, prejudice is common to us all, and is particularly conſpicuous amongſt all profeſſional men with reſpect to the Sciences which they profeſs.

His objections to Learning from the errors of learned men contain his obſervations upon the ſtudy of words; upon uſeleſs Knowledge; and upon Falſehood, called by him delicate Learning; contentious Learning; and fantaſtical Learning; all of them erroneouſly conſidered objections to Learning; as the ſtudy of words is merely the ſelection of one ſpecies of Knowledge; and contentious Learning is only the conflict of opinion, which ever exiſts when any Science is in progreſs, and the way from Senſe to the Underſtanding is not ſufficiently cleared; and Falſehood is one of the

conſequences attendant upon Inquiry, as our opinions, being formed not only by impreſſions upon our Senſes, but by confidence in the communication of others and our own Reaſonings, unavoidably teem with Error, which can by time alone be corrected.

As it is *Bacon's* doctrine that Knowledge conſiſts in underſtanding the properties of creatures and the names by which they are called, *the occupation of Adam in Paradiſe*, it may ſeem extraordinary that he ſhould not have formed a higher eſtimate than he appears to have formed of the ſtudy of words. Words aſſiſt thought; they teach us correctneſs; they enable us to acquire the knowledge and character of other Nations; and the ſtudy of ancient literature in particular, if it is not an exerciſe of the Intellect, is a diſcipline of Humanity; if it do not ſtrengthen the Underſtanding, it ſoftens and refines the Taſte; it gives us liberal views; it accuſtoms the Mind to take an intereſt in things foreign to itſelf; to love Virtue for its own ſake; to prefer glory to riches, and to fix our thoughts on the remote and permanent, inſtead of narrow and fleeting objects. It teaches us to believe that there is really ſomething great and excellent in the world, ſurviving all the ſhocks and accidents and fluctuations of opinion, and raiſes us above that low and ſervile fear, which bows only to preſent power and upſtart authority. *Rome* and *Athens* filled a place in the hiſtory of mankind which can never be occupied again. They were

two cities ſet on a hill, which cannot be hid; all eyes have ſeen them, and their light ſhines like a mighty ſea-mark into the abyſs of time,

Still green with bays each ancient altar ſtands.

But, notwithſtanding theſe advantages, *Bacon* ſays, *the ſtudying words and not matter is a diſtemper of Learning, of which Pygmalion's frenzy is a good emblem; for words are but the images of Matter, and to fall in love with them is all one as to fall in love with a Picture.*

Theſe different ſubjects are claſſed under the quaint expreſſion of *Diſtempers of Learning;* to which, that the Metaphor may be preſerved, he has appended various other defects, under the more quaint term of *peccant Humours of Learning.*

His obſervations upon the advantages of Learning, although encumbered by fanciful and minute analyſis, abound with beauty; for, not contenting himſelf with the ſimple poſition with which Philoſophy would be ſatisfied, that Knowledge teaches us how to ſelect what is beneficial, and avoid what is injurious, he enumerates various modes, divine and human, by which the happineſs reſulting from Knowledge ever has been and ever will be manifeſted.

After having ſtated what he terms *divine* proofs of the advantages of Knowledge, he ſays, the *human* proofs are:

1. *Learning diminiſhes afflictions from Nature.*
2. *Learning diminiſhes evils from man to man.*

3. *There is a union between Learning and military virtue.*
4. *Learning improves private Virtues.*
    1. *It takes away the barbariſm of men's minds.*
    2. *It takes away levity, temerity, and inſolency.*
    3. *It takes away vain admiration.*
    4. *It takes away or mitigates fear.*
    5. *It diſpoſes the conſtitution of the Mind not to be fixed or ſettled in its defects, but to be ſuſceptible of growth and reformation.*
5. *It is Power.*
6. *It advances fortune.*
7. *It is our greateſt ſource of delight.*
8. *It inſures immortality.*

Theſe poſitions are proved by all the force of his Reaſon, and adorned by all the beauty of his Imagination. When ſpeaking of the power of Knowledge to repreſs the inconveniences which ariſe from man to man, he ſays, *In Orpheus's theatre all beaſts and birds aſſembled, and, forgetting their ſeveral appetites, ſome of prey, ſome of game, ſome of quarrel, ſtood all ſociably together, liſtening to the airs and accords of the Harp; the ſound whereof no ſooner ceaſed, or was drowned by ſome louder noiſe, but every beaſt returned to his own Nature; wherein is aptly deſcribed the Nature and condition of men, who are full of ſavage and unre-*

claimed desires of profit, of lust, of revenge; which, as long as they give ear to Precepts, to Laws, to Religion, sweetly touched with eloquence and persuasion of books, of sermons, of harangues, so long is society and peace maintained; but if these instruments be silent, or sedition and tumult make them not audible, all things dissolve into anarchy and confusion.

So when explaining, amidst the advantages of Knowledge, its excellency in diffusing Happiness through succeeding ages, he says, *Let us conclude with the dignity and excellency of Knowledge and Learning in that whereunto man's Nature doth most aspire, which is, immortality or continuance: for to this tendeth generation, and raising of houses and families; to this buildings, foundations, and monuments; to this tendeth the desire of memory, fame, and celebration, and in effect the strength of all other human desires. We see then how far the monuments of Wit and Learning are more durable than the monuments of Power or of the Hands. For have not the verses of Homer continued twenty-five hundred years, or more, without the loss of a Syllable or Letter; during which time infinite Palaces, Temples, Castles, Cities, have been decayed and destroyed? It is not possible to have the true pictures or statues of Cyrus, Alexander, Cæsar; no, nor of the Kings or great personages of much later years; for the originals cannot last, and the copies cannot but leese of the life and Truth: but the images of men's Wits and Knowledges remain in*

books exempted from the wrong of Time, and capable of perpetual renovation. Neither are they fitly to be called images, becauſe they generate ſtill, and caſt their ſeeds in the Minds of others, provoking and cauſing infinite actions and opinions in ſucceeding ages; ſo that if the invention of the Ship was thought ſo noble, which carrieth riches and commodities from place to place, and conſociateth the moſt remote Regions in participation of their Fruits, how much more are letters to be magnified, which, as Ships, paſs through the vaſt ſeas of Time, and make Ages ſo diſtant to participate of the Wiſdom, Illuminations and Inventions, the one of the other?

After having thus explained ſome of the bleſſings attendant upon Knowledge, he concludes the firſt book with lamenting that theſe bleſſings are not more generally preferred.

The ſecond book, after various preliminary obſervations, and particularly upon the defects of univerſities, of which, from the ſuppoſition that they are formed rather for the diſcovery of new Knowledge than for diffuſing the Knowledge of our predeceſſors, he, through life, ſeems to have formed too high an eſtimate, he arranges and adorns every ſpecies of Hiſtory, which he includes within the province of Memory,—and every ſpecies of Poetry, by which Imagination can *elevate the Mind from the dungeon of the Body to the enjoying its own divine eſſence:*—and, paſſing from Poetry by ſaying, *but it is not good to ſtay too long in the Theatre: let us now paſs on to the judicial*

place or palace of the Mind, which we are to approach and view with more reverence and attention, he proceeds to the inveſtigation of every ſpecies of Philoſophy, divine, natural, and human, of which, from his analyſis of human Philoſophy, or the Science of Man, ſome conception may be formed of the extent and perfection of the different parts of the work.

Theſe different ſubjects, exhibited with this perſpicuity, are adorned with beautiful illuſtration and imagery: as, when explaining the doctrine of the will, divided into the image of good or the exhibition of truth, and the culture or *Georgics* of the mind, which is its huſbandry or tillage, ſo as to love the Truth which it ſees, he ſays, *The neglecting theſe Georgics ſeemeth to me no better than to exhibit a fair image or ſtatue, beautiful to behold, but without life or motion.*

Having thus made a ſmall globe of the intellectual world, he, looking at the work he had made, and hoping that it was good, thus concludes: *And being now at ſome pauſe, looking back into that I have paſſed through, this writing ſeemeth to me, ſi nunquam fallit imago, (as far as a man can judge of his own work) not much better than the noiſe or ſound which Muſicians make while they are tuning their Inſtruments, which is nothing pleaſant to hear, but yet is a cauſe why the Muſic is ſweeter afterwards: ſo have I been content to tune the Inſtruments of the Muſes, that they may play that have better hands. And ſurely, when I ſet before me the*

condition of these times, in which Learning hath made her third visitation or circuit in all the qualities thereof: as the excellency and vivacity of the Wits of this age; the noble helps and lights which we have by the travails of Ancient Writers; the art of Printing which communicateth books to men of all fortunes; the openness of the world by navigation, which hath disclosed multitudes of Experiments, and a mass of Natural History; the leisure wherewith these times abound, not employing men so generally in civil business as the states of Græcia did, in respect of their popularity, and the state of Rome, in respect of the greatness of their Monarchy; the present disposition of these times at this instant to peace; the consumption of all that ever can be said in controversies of Religion, which have so much diverted men from other Sciences; and the inseparable property of time, which is ever more and more to disclose Truth,—I cannot but be raised to this persuasion, that this third period of time will far surpass that of the Grecian and Roman Learning; only if men will know their own strength, and their own weakness both; and take, one from the other, light of invention, and not fire of contradiction; and esteem of the inquisition of Truth, as of any enterprize, and not as of a quality or ornament; and employ Wit and magnificence to things of worth and excellency, and not to things vulgar and of popular estimation.

The *Advancement of Learning* was published in the year 1605. Lord *Bacon* afterwards greatly enlarged it; and having divided it into nine books,

and ſubdivided each book into chapters, he cauſed it to be tranſlated into *Latin*, by Mr. *George Herbert* and ſome other friends, under the title of *De Dignitate et Augmentis Scientiarum;* and was publiſhed in folio in 1623. The enlarged work was afterwards re-tranſlated into Engliſh by Dr. *Gilbert Watts*, and publiſhed at *Oxford* in 1640; but, according to Dr. *Teniſon*, the tranſlation *is too much defective.* See the Life of Lord *Bacon*, p. 409.

B. M.

THE TWO BOOKS OF FRANCIS BACON.

Of the Proficience and Advancement of Learning, Divine and Human.

To the King.

THE FIRST BOOK OF FRANCIS BACON.

Of the Proficience and Advancement of Learning, Divine and Human.

To the King.

THERE were, under the Law, excellent King, both daily Sacrifices, and freewill Offerings; the one proceeding upon ordinary obſervance, the other upon a devout cheerfulneſs: in like manner there belongeth to Kings from their Servants both Tribute of duty and Preſents of affection. In the former of theſe I hope I ſhall not live to be wanting, according to my moſt humble duty, and the good pleaſure of your Majeſty's employments: for the latter, I thought it more reſpective to make choice of ſome oblation, which might rather refer to the propriety and excellency of your individual perſon, than to the buſineſs of your Crown and State.

Wherefore, repreſenting your Majeſty many times unto my mind, and beholding you not with

the inquiſitive eye of preſumption, to diſcover that which the Scripture telleth me is inſcrutable, but with the obſervant eye of duty and admiration; leaving aſide the other parts of your virtue and fortune, I have been touched, yea, and poſſeſſed with an extreme wonder at thoſe your virtues and faculties, which the Philoſophers call intellectual; the largeneſs of your Capacity, the faithfulneſs of your memory, the ſwiftneſs of your apprehenſion, the penetration of your Judgment, and the facility and order of your elocution: and I have often thought, that of all the perſons living that I have known, your Majeſty were the beſt inſtance to make a man of *Plato's* opinion, that all knowledge is but remembrance, and that the mind of man by nature knoweth all things, and hath but her own native and original motions (which by the ſtrangeneſs and darkneſs of this Tabernacle of the body are ſequeſtered) again revived and reſtored: ſuch a light of Nature I have obſerved in your Majeſty, and ſuch a readineſs to take flame and blaze from the leaſt occaſion preſented, or the leaſt ſpark of another's knowledge delivered. And as the Scripture ſaith of the wiſeſt king, *That his heart was as the ſands of the Sea;* which though it be one of the largeſt bodies, yet it conſiſteth of the ſmalleſt and fineſt portions; ſo hath God given your Majeſty a compoſition of underſtanding admirable, being able to compaſs and comprehend the greateſt matters, and nevertheleſs to touch and apprehend the leaſt; whereas it ſhould ſeem an impoſſibility

in Nature, for the ſame Inſtrument to make itſelf fit for great and ſmall Works. And for your gift of ſpeech, I call to mind what *Cornelius Tacitus* ſaith of *Auguſtus Cæſar: Auguſto profluens, et quæ principem deceret, eloquentia fuit.* For, if we note it well, ſpeech that is uttered with labour and difficulty, or ſpeech that ſavoureth of the affection of art and precepts, or ſpeech that is framed after the imitation of ſome pattern of eloquence, though never ſo excellent; all this has ſomewhat ſervile, and holding of the ſubject. But your Majeſty's manner of ſpeech is indeed prince-like, flowing as from a fountain, and yet ſtreaming and branching itſelf into Nature's order, full of facility and felicity, imitating none, and inimitable by any. And as in your civil Eſtate there appeareth to be an emulation and contention of your Majeſty's virtue with your fortune; a virtuous diſpoſition with a fortunate regiment; a virtuous expectation, when time was, of your greater fortune, with a proſperous poſſeſſion thereof in the due time; a virtuous obſervation of the Laws of marriage, with moſt bleſſed and happy fruit of marriage; a virtuous and moſt Chriſtian deſire of peace, with a fortunate inclination in your neighbour Princes thereunto: ſo likewiſe, in theſe intellectual matters, there ſeemeth to be no leſs contention between the excellency of your Majeſty's gifts of Nature, and the univerſality and perfection of your Learning. For I am well aſſured that this which I ſhall ſay is no amplification at all, but a poſitive and mea-

ſured truth; which is, that there hath not been ſince Chriſt's time any King or temporal Monarch, which has been ſo learned in all literature and erudition, divine and human. For let a man ſeriouſly and diligently revolve and peruſe the ſucceſſion of the Emperors of *Rome;* of which *Cæſar* the Dictator, who lived ſome years before CHRIST, and *Marcus Antoninus*, were the beſt Learned; and ſo deſcend to the Emperors of *Græcia*, or of the Weſt; and then to the lines of *France*, *Spain*, *England*, *Scotland*, and the reſt, and he ſhall find this judgment is truly made. For it ſeemeth much in a King, if, by the compendious extractions of other men's Wits and Labours, he can take hold of any ſuperficial Ornaments and ſhews of Learning; or if he countenance and prefer learning and learned men: but to drink indeed of the true Fountains of learning, nay, to have ſuch a fountain of learning in himſelf, in a King, and in a King born, is almoſt a Miracle. And the more, becauſe there is met in your Majeſty a rare Conjunction, as well of Divine and ſacred literature, as of profane and human; ſo as your Majeſty ſtandeth inveſted of that triplicity, which in great veneration was aſcribed to the ancient *Hermes;* the power and fortune of a King, the knowledge and illumination of a Prieſt, and the learning and univerſality of a Philoſopher. This propriety, inherent and individual attribute in your Majeſty, deſerveth to be expreſſed not only in the fame and admiration of the preſent time, nor in the Hiſtory or tradition

of the ages ſucceeding, but alſo in ſome ſolid work, fixed memorial, and immortal monument, bearing a Character or ſignature both of the power of a King, and the difference and perfection of ſuch a King.

Therefore I did conclude with myſelf, that I could not make unto your Majeſty a better oblation than of ſome Treatiſe tending to that end, whereof the ſum will conſiſt of theſe two parts; the former, concerning the excellency of Learning and Knowledge, and the excellency of the merit and true glory in the Augmentation and Propagation thereof: the latter, what the particular acts and works are, which have been embraced and undertaken for the Advancement of Learning; and again, what defects and undervalues I find in ſuch particular acts: to the end, that though I cannot poſitively or affirmatively adviſe your Majeſty, or propound unto you framed particulars; yet I may excite your Princely Cogitations to viſit the excellent treaſure of your own mind, and thence to extract particulars for this purpoſe, agreeable to your Magnanimity and Wiſdom.

N the entrance to the former of theſe, to clear the way, and as it were, to make ſilence, to have the true Teſtimonies concerning the dignity of Learning to be better heard, without the interruption of tacit objections; I think good to deliver it from the diſcredits and diſgraces which it hath re-

ceived, all from Ignorance; but Ignorance ſeverally diſguiſed; appearing ſometimes in the zeal and jealouſy of Divines; ſometimes in the ſeverity and arrogancy of Politicians; and ſometimes in the errors and imperfections of Learned men themſelves.

I hear the former ſort ſay, that knowledge is of thoſe things which are to be accepted of with great limitation and caution; that the aſpiring to overmuch knowledge, was the original temptation and ſin, whereupon enſued the fall of Man; that knowledge hath in it ſomewhat of the Serpent, and therefore where it entereth into a man it makes him ſwell; *Scientia inflat:* that *Solomon* gives a cenſure, *That there is no end of making books, and that much reading is a wearineſs of the fleſh;* and again in another place, *That in ſpacious knowledge there is much contriſtation, and that he that increaſeth knowledge increaſeth anxiety;* that St. *Paul* gives a Caveat, *That we be not ſpoiled through vain philoſophy;* that experience demonſtrates how learned men have been Arch-heretics, how learned times have been inclined to Atheiſm, and how the contemplation of ſecond Cauſes doth derogate from our dependance upon GOD, who is the firſt cauſe.

To diſcover then the ignorance and error of this opinion, and the miſunderſtanding in the grounds thereof, it may well appear theſe men do not obſerve or conſider, that it was not the pure knowledge of Nature and Univerſality, a knowledge by the light whereof man did give names unto other

creatures in *Paradiſe*, as they were brought before him, according unto their proprieties, which gave the occaſion to the fall: but it was the proud knowledge of good and evil, with an intent in man to give law unto himſelf, and to depend no more upon GOD's Commandments, which was the form of the temptation. Neither is it any quantity of knowledge, how great ſoever, that can make the mind of man to ſwell; for nothing can fill, much leſs extend the ſoul of man, but GOD and the contemplation of GOD; and therefore *Solomon*, ſpeaking of the two principal ſenſes of Inquiſition, the Eye and the Ear, affirmeth that the Eye is never ſatisfied with ſeeing, nor the Ear with hearing; and if there be no fulneſs, then is the continent greater than the Content: ſo of knowledge itſelf, and the mind of man, whereto the ſenſes are but Reporters, he defineth likewiſe in theſe words, placed after that Calendar or Ephemerides, which he maketh of the diverſities of times and ſeaſons for all actions and purpoſes; and concludeth thus: *GOD hath made all things beautiful, or decent, in the true return of their ſeaſons: Alſo he hath placed the world in man's heart, yet cannot man find out the work which GOD worketh from the beginning to the end:* declaring not obſcurely, that GOD hath framed the mind of man as a mirror or glaſs, capable of the Image of the univerſal world, and joyful to receive the impreſſion thereof, as the Eye joyeth to receive light; and not only delighted in beholding the variety of things and viciſſitude of

times, but raiſed alſo to find out and diſcern the ordinances and decrees, which throughout all thoſe Changes are infallibly obſerved. And although he doth inſinuate that the ſupreme or ſummary law of Nature, which he calleth, *The work which GOD worketh from the beginning to the end, is not poſſible to be found out by Man;* yet that doth not derogate from the capacity of the mind, but may be referred to the impediments, as of ſhortneſs of life, ill conjunction of labours, ill tradition of knowledge over from hand to hand, and many other Inconveniences, whereunto the condition of Man is ſubject. For that nothing parcel of the world is denied to Man's inquiry and invention, he doth in another place rule over, when he ſaith, *The Spirit of Man is as the Lamp of God, wherewith he ſearcheth the inwardneſs of all ſecrets.* If then ſuch be the capacity and receipt of the mind of Man, it is manifeſt that there is no danger at all in the proportion or quantity of knowledge, how large ſoever, leſt it ſhould make it ſwell or out-compaſs itſelf; no, but it is merely the quality of knowledge, which, be it in quantity more or leſs, if it be taken without the true corrective thereof, hath in it ſome Nature of venom or malignity, and ſome effects of that venom, which is ventoſity or ſwelling. This corrective ſpice, the mixture whereof maketh knowledge ſo Sovereign, is Charity, which the Apoſtle immediately addeth to the former Clauſe: for ſo he ſaith, *Knowledge bloweth up, but Charity buildeth up;* not unlike unto that which he delivereth in

another place: *If I ſpake*, ſaith he, *with the tongues of Men and Angels, and had not Charity, it were but as a Tinkling Cymbal;* not but that it is an excellent thing to ſpeak with the Tongues of Men and Angels, but becauſe, if it be ſevered from Charity, and not referred to the good of Men and Mankind, it hath rather a ſounding and Unworthy glory, than a meriting and ſubſtantial Virtue. And as for that Cenſure of *Solomon*, concerning the exceſs of Writing and Reading Books, and the anxiety of Spirit which redoundeth from Knowledge; and that Admonition of St. *Paul*, *That we be not ſeduced by vain Philoſophy;* let thoſe places be rightly underſtood, and they do indeed excellently ſet forth the true bounds and limitations, whereby human knowledge is confined and circumſcribed; and yet without any ſuch contracting or coarctation, but that it may comprehend all the Univerſal nature of things; for theſe limitations are three: the firſt, *That we do not ſo place our felicity in knowledge, as we forget our mortality:* the ſecond, *That we make application of our Knowledge, to give ourſelves repoſe and contentment, and not diſtaſte or repining:* the third, *That we do not preſume by the contemplation of nature to attain to the Myſteries of God.* For as touching the firſt of theſe, *Solomon* doth excellently expound himſelf in another place of the ſame Book, where he ſaith: *I ſaw well that knowledge recedeth as far from ignorance as light doth from darkneſs; and that the wiſe man's eyes keep watch in his head, whereas the*

fool roundeth about in darkneſs: but withal I learned, that the ſame mortality involveth them both. And for the ſecond, certain it is, there is no vexation or anxiety of mind which reſulteth from knowledge, otherwiſe than merely by accident; for all knowledge, and wonder (which is the ſeed of knowledge) is an impreſſion of pleaſure in itſelf: but when men fall to framing Concluſions out of their Knowledge, applying it to their particular, and miniſtering to themſelves thereby weak fears or vaſt deſires, there groweth that carefulneſs and trouble of mind which is ſpoken of: for then Knowledge is no more. *Lumen ſiccum*, whereof *Heraclitus* the profound ſaid, *Lumen ſiccum optima anima;* but it becometh *Lumen madidum, or maceratum*, being ſteeped and infuſed in the humours of the affections. And as for the third point, it deſerveth to be a little ſtood upon, and not to be lightly paſſed over: for if any man ſhall think by view and inquiry into theſe ſenſible and material things to attain that light, whereby he may reveal unto himſelf the nature or will of God, then indeed is he ſpoiled by vain Philoſophy: for the contemplation of God's Creatures and Works produceth (having regard to the works and creatures themſelves), knowledge, but having regard to God, no perfect knowledge, but wonder, which is broken knowledge. And therefore it was moſt aptly ſaid by one of *Plato's* ſchool, *That the ſenſe of man carrieth a reſemblance with the Sun, which, as we ſee, openeth and revealeth all the terreſtrial Globe;*

but then again it obſcureth and concealeth the ſtars and celeſtial Globe: ſo doth the Senſe diſcover Natural things, but it darkeneth and ſhutteth up Divine. And hence it is true, that it hath proceeded, that divers great Learned men have been Heretical, whilſt they have ſought to fly up to the ſecrets of the Deity by the waxen Wings of the Senſes. And as for the conceit that too much knowledge ſhould incline a man to Atheiſm, and that the ignorance of ſecond cauſes ſhould make a more devout dependence upon GOD, which is the firſt cauſe; Firſt, it is good to aſk the queſtion which *Job* aſked of his friends: *Will you lie for* GOD, *as one man will do for another, to gratify him?* For certain it is that GOD worketh nothing in Nature but by ſecond cauſes: and if they would have it otherwiſe believed, it is mere impoſture, as it were in favour towards GOD; and nothing elſe but to offer to the Author of Truth the unclean ſacrifice of a lie. But farther, it is an aſſured Truth, and a Concluſion of Experience, that a little or ſuperficial knowledge of Philoſophy may incline the mind of man to Atheiſm, but a farther proceeding therein doth bring the mind back again to Religion: for in the entrance of Philoſophy, when the ſecond Cauſes, which are next unto the ſenſes, do offer themſelves to the mind of Man, if it dwell and ſtay there it may induce ſome oblivion of the higheſt cauſe; but when a man paſſeth on farther, and ſeeth the dependence of cauſes, and the works of Providence; then, according to the Allegory of

the Poets, he will eaſily believe that the higheſt Link of Nature's Chain muſt needs be tied to the foot of *Jupiter's* Chair. To conclude, therefore, let no man, upon a weak conceit of Sobriety, or an ill-applied moderation, think or maintain, that a man can ſearch too far, or be too well ſtudied in the Book of GOD's Word, or in the Book of GOD's Works; Divinity or Philoſophy; but rather let Men endeavour an endleſs Progreſs or proficience in both; only let men beware that they apply both to Charity, and not to ſwelling; to uſe, and not to oſtentation; and again, that they do not unwiſely mingle or confound theſe Learnings together.

And as for the diſgraces which Learning receiveth from Politicians, they be of this Nature; that Learning doth ſoften men's minds, and makes them more unapt for the honour and exerciſe of Arms; that it doth mar and pervert Men's diſpoſitions for matter of government and policy; in making them too curious and irreſolute by variety of reading; or too peremptory or poſitive by ſtrictneſs of rules and axioms; or too immoderate and overweening by reaſon of the greatneſs of examples; or too incompatible and differing from the times, by reaſon of the diſſimilitude of examples; or at leaſt, that it doth divert men's travails from action and buſineſs, and bringeth them to a love of leiſure and privateneſs; and that it doth bring into States a relaxation of diſcipline, whilſt every Man is more ready to argue, than to obey and execute.

Out of this conceit, *Cato*, ſurnamed the Cenſor, one of the wiſeſt men indeed that ever lived, when *Carneades* the Philoſopher came in Embaſſage to *Rome*, and that the young men of *Rome* began to flock about him, being allured with the ſweetneſs and Majeſty of his eloquence and learning, gave counſel in open Senate, that they ſhould give him his diſpatch with all ſpeed, leſt he ſhould infectand inchant the minds and affections of the youth, and at unawares bring in an alteration of the manners and Cuſtoms of the State. Out of the ſame conceit, or humour, did *Virgil*, turning his pen to the advantage of his Country, and the diſadvantage of his own profeſſion, make a kind of ſeparation between policy and government, and between Arts and Sciences, in the verſes ſo much renowned, attributing and challenging the one to the *Romans*, and leaving and yielding the other to the *Grecians; Tu regere imperio populos*, *Romane*, *memento*, *Hæ tibi erunt artes*, *&c.* So likewiſe we ſee that *Anytus*, the accuſer of *Socrates*, laid it as an Article of charge and accuſation againſt him, that he did, with the variety and power of his diſcourſes and diſputations, withdraw young men from due reverence to the Laws and Cuſtoms of their Country; and that he did profeſs a dangerous and pernicious Science, which was, to make the worſe matter ſeem the better, and to ſuppreſs truth by force of eloquence and ſpeech.

But theſe, and the like imputations, have rather a countenance of gravity, than any ground of Juſ-

tice: for experience doth warrant, that both in perſons and in times, there hath been a meeting and concurrence in Learning and Arms, flouriſhing and excelling in the ſame men and the ſame ages. For, as for men, there cannot be a better, nor the like inſtance, as of that pair, *Alexander* the Great and *Julius Cæſar* the Dictator; whereof the one was *Ariſtotle's* Scholar in Philoſophy, and the other was *Cicero's* Rival in eloquence: or if any man had rather call for Scholars that were great Generals, than Generals that were great Scholars, let him take *Epaminondas* the *Theban* or *Xenophon* the *Athenian*; whereof the one was the firſt that abated the power of *Sparta*, and the other was the firſt that made way to the overthrow of the Monarchy of *Perſia*. And this concurrence is yet more viſible in times than in perſons, by how much an age is a greater object than a Man. For both in *Ægypt*, *Aſſyria*, *Perſia*, *Græcia*, and *Rome*, the ſame times that are moſt renowned for Arms, are likewiſe moſt admired for Learning; ſo that the greateſt Authors and Philoſophers, and the greateſt Captains and Governors have lived in the ſame ages. Neither can it otherwiſe be: for as, in Man, the ripeneſs of ſtrength of the body and mind cometh much about an age, ſave that the ſtrength of the body cometh ſomewhat the more early; ſo in States, Arms and Learning, whereof the one correſpondeth to the body, the other to the ſoul of Man, have a concurrence or near ſequence in times.

And for matter of Policy and Government, that Learning ſhould rather hurt, than enable thereunto, is a thing very improbable: we ſee it is accounted an error to commit a natural body to Empiric Phyſicians, which commonly have a few pleaſing receipts, whereupon they are confident and adventurous, but know neither the cauſes of diſeaſes, nor the complexions of Patients, nor peril of accidents, nor the true method of Cures: we ſee it is a like error to rely upon Advocates or Lawyers, which are only men of practice, and not grounded in their Books, who are many times eaſily ſurpriſed, when matter falleth out beſides their experience, to the prejudice of the cauſes they handle: ſo, by like reaſon, it cannot be but a matter of doubtful conſequence, if States be managed by Empiric Stateſmen, not well mingled with men grounded in Learning. But contrariwiſe, it is almoſt without inſtance contradictory, that ever any government was diſaſtrous that was in the hands of Learned Governors. For howſoever it hath been ordinary with politic men to extenuate and diſable Learned men by the names of *Pedants;* yet in the Records of time it appeareth, in many particulars, that the Governments of Princes in minority (notwithſtanding the infinite diſadvantage of that kind of State) have nevertheleſs excelled the government of Princes of mature age, even for that reaſon which they ſeek to traduce, which is, that by that occaſion the State hath

been in the hands of *Pedants:* for ſo was the State of *Rome* for the firſt five years, which are ſo much magnified, during the minority of *Nero*, in the hands of *Seneca*, a *Pedant:* ſo it was again, for ten years' ſpace or more, during the minority of *Gordianus* the younger, with great applauſe and contentation in the hands of *Miſitheus*, a *Pedant:* ſo was it before that, in the minority of *Alexander Severus*, in like happineſs, in hands not much unlike, by reaſon of the rule of the women, who were aided by the Teachers and Preceptors. Nay, let a man look into the government of the Biſhops of *Rome*, as by name, into the government of *Pius Quintus*, and *Sextus Quintus*, in our times, who were both at their entrance eſteemed but as Pedantical Friars, and he ſhall find that ſuch Popes do greater things, and proceed upon truer principles of Eſtate, than thoſe which have aſcended to the Papacy from an education and breeding in affairs of Eſtate and Courts of Princes; for although men bred in Learning are perhaps to ſeek in points of convenience, and accommodating for the preſent, which the *Italians* call *Ragioni di ſtato*, whereof the ſame *Pius Quintus* could not hear ſpoken with patience, terming them Inventions againſt Religion and the moral Virtues; yet on the other ſide, to recompenſe that, they are perfect in thoſe ſame plain grounds of Religion, Juſtice, Honour, and Moral virtue, which if they be well and watchfully purſued, there will be ſeldom uſe of thoſe other, no more than of Phyſic in a ſound

or well-dieted body. Neither can the experience of one man's life furniſh examples and precedents for the events of one man's life: for, as it happeneth ſometimes that the Grandchild, or other deſcendant, reſembleth the Anceſtor more than the Son; ſo many times occurrences of preſent times may ſort better with ancient examples, than with thoſe of the latter or immediate times: and laſtly, the wit of one man can no more countervail Learning, than one man's means can hold way with a common purſe.

And as for thoſe particular ſeducements, or indiſpoſitions of the mind for Policy and Government, which Learning is pretended to inſinuate; if it be granted that any ſuch thing be, it muſt be remembered withal, that Learning miniſtereth in every of them greater ſtrength of Medicine or Remedy, than it offereth cauſe of indiſpoſition or infirmity; for if, by a ſecret operation, it make men perplexed and irreſolute, on the other ſide, by plain precept, it teacheth them when and upon what ground to reſolve; yea, and how to carry things in ſuſpenſe without prejudice, till they reſolve; if it make men poſitive and regular, it teacheth them what things are in their nature demonſtrative, and what are conjectural; and as well the uſe of diſtinctions and exceptions, as the latitude of principles and rules. If it miſlead by diſproportion, or diſſimilitude of Examples, it teacheth men the force of Circumſtances, the errors of compariſons, and all the cautions of application;

ſo that in all theſe it doth rectify more effectually than it can pervert. And theſe Medicines it conveyeth into men's minds much more forcibly by the quickneſs and penetration of Examples. For let a man look into the errors of *Clement* the ſeventh, ſo livelily deſcribed by *Guicciardine*, who ſerved under him, or into the errors of *Cicero*, painted out by his own pencil in his Epiſtles to *Atticus*, and he will fly apace from being irreſolute. Let him look into the errors of *Phocion*, and he will beware how he be obſtinate or inflexible. Let him but read the Fable of *Ixion*, and it will hold him from being vaporous or imaginative. Let him look into the errors of *Cato* the ſecond, and he will never be one of the *Antipodes*, to tread oppoſite to the preſent World.

And for the conceit, that Learning ſhould diſpoſe men to leiſure and privateneſs, and make Men ſlothful; it were a ſtrange thing if that, which accuſtometh the mind to a perpetual motion and agitation, ſhould induce ſlothfulneſs: whereas contrariwiſe it may be truly affirmed, that no kind of men love buſineſs for itſelf, but thoſe that are learned; for other perſons love it for profit, as a hireling, that loves the work for the wages; or for honour, as becauſe it beareth them up in the eyes of men, and refreſheth their reputation, which otherwiſe would wear: or becauſe it putteth them in mind of their Fortune, and giveth them occaſion to pleaſure and diſpleaſure; or becauſe it exerciſeth ſome faculty wherein they take pride, and ſo enter-

taineth them in good humour and pleaſing conceits toward themſelves; or becauſe it advanceth any other their ends. So that, as it is ſaid of untrue valours, that ſome men's valours are in the eyes of them that look on; ſo ſuch men's induſtries are in the eyes of others, or at leaſt in regard of their own deſignments: only learned men love buſineſs, as an action according to nature, as agreeable to health of mind, as exerciſe is to health of body, taking pleaſure in the action itſelf, and not in the purchaſe: ſo that of all men they are the moſt indefatigable, if it be towards any buſineſs which can hold or detain their mind.

And if any man be laborious in reading and ſtudy, and yet idle in buſineſs and action, it groweth from ſome weakneſs of body, or ſoftneſs of ſpirit; ſuch as *Seneca* ſpeaketh of: *Quidam tam ſunt umbratiles, ut putent in turbido eſſe quicquid in luce eſt;* and not of Learning: well may it be, that ſuch a point of a man's nature may make him give himſelf to learning, but it is not Learning that breedeth any ſuch point in his Nature.

And that Learning ſhould take up too much time or leiſure: I anſwer; the moſt active or buſy man that hath been or can be, hath, no queſtion, many vacant times of leiſure, while he expecteth the tides and returns of buſineſs (except he be either tedious and of no diſpatch, or lightly and unworthily ambitious to meddle in things that may be better done by others:) and then the queſtion is, but how thoſe ſpaces and times of leiſure ſhall

be filled and ſpent; whether in pleaſures or in ſtudies; as was well anſwered by *Demoſthenes* to his adverſary *Æſchines*, that was a man given to pleaſure, and told him, *That his Orations did ſmell of the Lamp: Indeed*, (ſaid *Demoſthenes*,) *there is a great difference between the things that you and I do by Lamp-light.*' So as no Man need doubt that Learning will expulſe buſineſs; but rather it will keep and defend the poſſeſſion of the mind againſt idleneſs and pleaſure, which otherwiſe at unawares may enter, to the prejudice of both.

Again, for that other conceit, that learning ſhould undermine the reverence of Laws and Government, it is aſſuredly a mere depravation and calumny, without all ſhadow of truth. For to ſay, that a blind cuſtom of Obedience ſhould be a ſurer obligation than duty taught and underſtood; it is to affirm, that a blind man may tread ſurer by a guide than a ſeeing man can by a light. And it is without all controverſy, that Learning doth make the minds of men gentle, generous, maniable and pliant to government; whereas Ignorance makes them churliſh, thwarting, and mutinous: and the evidence of time doth clear this aſſertion, conſidering that the moſt barbarous, rude, and unlearned times have been moſt ſubject to tumults, ſeditions, and changes.

And as to the judgment of *Cato*, the Cenſor, he was well puniſhed for his blaſphemy againſt Learning, in the ſame kind wherein he offended; for when he was paſt threeſcore years old, he was taken

with an extreme desire to go to School again, and to learn the *Greek* tongue, to the end to peruse the *Greek* Authors; which doth well demonstrate, that his former censure of the *Grecian* Learning was rather an affected gravity, than according to the inward sense of his own opinion. And as for *Virgil's* verses, though it pleased him to brave the world in taking to the *Romans* the Art of Empire, and leaving to others the arts of subjects; yet so much is manifest, that the *Romans* never ascended to that height of Empire, till the time they had ascended to the height of other Arts. For in the time of the two first *Cæsars*, which had the Art of government in greatest perfection, there lived the best Poet, *Virgilius Maro;* the best Historiographer, *Titus Livius;* the best Antiquary, *Marcus Varro;* and the best, or second Orator, *Marcus Cicero*, that to the memory of man are known. As for the accusation of *Socrates*, the time must be remembered when it was prosecuted; which was under the thirty Tyrants, the most base, bloody, and envious persons that have governed; which revolution of State was no sooner over, but *Socrates*, whom they had made a person criminal, was made a person heroical, and his memory accumulate with honours divine and human; and those discourses of his which were then termed corrupting of manners, were after acknowledged for sovereign Medicines of the mind and manners, and so have been received ever since till this day. Let this, therefore, serve for answer to Politicians, which in their

humorous ſeverity, or in their feigned gravity, have preſumed to throw imputations upon Learning; which redargution nevertheleſs, (ſave that we know not whether our labours may extend to other ages) were not needful for the preſent, in regard of the love and reverence towards Learning, which the example and countenance of two ſo learned Princes, Queen *Elizabeth*, and your Majeſty, being as *Caſtor* and *Pollux*, *Lucida Sidera*, Stars of excellent light and moſt benign influence, hath wrought in all men of place and authority in our Nation.

Now therefore we come to that third ſort of diſcredit or diminution of credit, that groweth unto Learning from learned men themſelves, which commonly cleaveth faſteſt: it is either from their Fortune; or from their manners; or from the nature of their Studies. For the firſt, it is not in their power; and the ſecond is accidental; the third only is proper to be handled: but becauſe we are not in hand with true meaſure, but with popular eſtimation and conceit, it is not amiſs to ſpeak ſomewhat of the two former. The derogations, therefore, which grow to Learning from the fortune or condition of learned men, are either in reſpect of ſcarcity of means, or in reſpect of privateneſs of life, and meanneſs of employments.

Concerning want, and that it is the caſe of Learned men uſually to begin with little, and not to grow rich ſo faſt as other men, by reaſon they convert not their labours chiefly to lucre and increaſe: it were good to leave the common place

in Commendation of poverty to ſome Friar to handle, to whom much was attributed by *Machiavel* in this point; when he ſaid, *That the Kingdom of the Clergy had been long before at an end, if the reputation and reverence towards the poverty of Friars had not borne out the ſcandal of the ſuperfluities and exceſſes of Biſhops and Prelates.* So a Man might ſay that the felicity and delicacy of Princes and great Perſons had long ſince turned to Rudeneſs and Barbariſm, if the poverty of Learning had not kept up Civility and Honour of life: but without any ſuch advantages, it is worthy the obſervation, what a reverend and honoured thing poverty of fortune was, for ſome ages, in the *Roman* State, which nevertheleſs was a State without Paradoxes: for we ſee what *Titus Livius* ſaith in his Introduction: *Cæterum aut me amor negotii ſuſcepti fallit aut nulla unquam reſpublica nec major, nec ſanctior, nec bonis exemplis ditior fuit; nec in quam tam ſeræ avaritia luxuriaque immigraverint; nec ubi tantus ac tam diu paupertati ac parſimoniæ honos fuerit.* We ſee likewiſe, after that the State of *Rome* was not itſelf, but did degenerate, how that perſon, that took upon him to be Counſellor to *Julius Cæſar* after his Victory, where to begin his reſtoration of the State, maketh it of all points the moſt ſummary to take away the eſtimation of Wealth: *Verum hæc, et omnia mala pariter cum honore pecuniæ deſinent: Si neque Magiſtratus, neque alia vulgo cupienda, venalia erunt.* To conclude this point, as it was truly ſaid, that

Rubor eſt virtutis color, though ſometime it come from vice; ſo it may be fitly ſaid that *Paupertas eſt virtutis fortuna*, though ſometime it may proceed from miſgovernment and accident. Surely *Solomon* hath pronounced it both in cenſure, *Qui feſtinat ad divitias non erit inſons;* and in precept; *Buy the truth, and ſell it not; And ſo of wiſdom and knowledge;* judging that means were to be ſpent upon learning, and not learning to be applied to means. And as for the privateneſs, or obſcureneſs (as it may be in vulgar eſtimation accounted) of life of contemplative men; it is a Theme ſo common, to extol a private life not taxed with ſenſuality and ſloth, in compariſon and to the diſadvantage of a civil life, for ſafety, liberty, pleaſure, and dignity, or at leaſt freedom from indignity, as no man handleth it, but handleth it well: ſuch a conſonancy it hath to men's conceits in the expreſſing, and to men's conſents in the allowing. This only I will add, that Learned Men forgotten in States, and not living in the eyes of men, are like the Images of *Caſſius* and *Brutus* in the funeral of *Junia:* of which not being repreſented, as many others were, *Tacitus* ſaith, *Eo ipſo præfulgebant, quod non viſebantur.*

And for meanneſs of employment, that which is moſt traduced to contempt is that the government of youth is commonly allotted to them; which age, becauſe it is the age of leaſt authority, it is tranſferred to the diſeſteeming of thoſe employments wherein youth is converſant, and which are con-

verſant about youth. But how unjuſt this traducement is (if you will reduce things from popularity of opinion to meaſure of reaſon) may appear in that, we ſee men are more curious what they put into a new Veſſel, than into a Veſſel ſeaſoned; and what mould they lay about a young plant, than about a Plant corroborate; ſo as the weakeſt Terms and Times of all things uſe to have the beſt applications and helps. And will you hearken to the *Hebrew Rabbins? Your young men ſhall ſee Viſions, and your old men ſhall dream dreams;* ſay the youth is the worthier age, for that Viſions are nearer apparitions of GOD than dreams. And let it be noted, that howſoever the Condition of life of *Pedants* hath been ſcorned upon Theatres, as the Ape of Tyranny; and that the modern looſeneſs or negligence hath taken no due regard to the choice of Schoolmaſters and Tutors; yet the ancient wiſdom of the beſt times did always make a juſt complaint, that States were too buſy with their Laws, and too negligent in point of education: which excellent part of ancient diſcipline hath been in ſome ſort revived of late times by the Colleges of the *Jeſuits;* of whom, although in regard of their ſuperſtition I may ſay, *Quo meliores, eo deteriores;* yet in regard of this, and ſome other points concerning human Learning and Moral matters, I may ſay, as *Ageſilaus* ſaid to his enemy *Pharnabazus*, *Talis quum ſis, utinam noſter eſſes.* And thus much touching the diſcredits drawn from the fortunes of learned men.

As touching the Manners of learned men, it is a thing perſonal and individual: and no doubt there be amongſt them, as in other profeſſions, of all temperatures: but yet ſo as it is not without truth, which is ſaid, that *Abeunt ſtudia in mores*, Studies have an influence and operation upon the manners of thoſe that are converſant in them.

But upon an attentive and indifferent review, I for my part cannot find any diſgrace to Learning can proceed from the manners of learned men not inherent to them as they are learned; except it be a fault (which was the ſuppoſed fault of *Demoſthenes*, *Cicero*, *Cato* the ſecond, *Seneca*, and many more) that, becauſe the times they read of are commonly better than the times they live in, and the duties taught better than the duties practiſed, they contend ſometimes too far to bring things to perfection, and to reduce the corruption of manners to honeſty of precepts, or examples of too great height. And yet hereof they have Caveats enough in their own walks. For *Solon*, when he was aſked whether he had given his Citizens the beſt laws, anſwered wiſely, *Yea, of ſuch as they would receive:* and *Plato*, finding that his own heart could not agree with the corrupt manners of his Country, refuſed to bear place or office; ſaying, *That a man's Country was to be uſed as his Parents were, that is, with humble perſuaſions, and not with conteſtations.* And *Cæſar's* Counſellor put in the ſame Caveat, *Non ad vetera inſtituta revocans quæ jampridem corruptis moribus ludibrio ſunt:* and *Ci-*

cero noteth this error directly in *Cato* the ſecond, when he writes to his friend *Atticus;* Cato *optime ſentit, ſed nocet interdum reipublicæ; loquitur enim tanquam in republica* Platonis, *non tanquam in fæce* Romuli. And the ſame *Cicero* doth excuſe and expound the Philoſophers for going too far, and being too exact in their preſcripts, when he ſaith, *Iſti ipſi præceptores virtutis et Magiſtri, videntur fines officiorum paulo longius quam natura vellet protuliſſe, ut cum ad ultimum animo contendiſſemus, ibi tamen, ubi oportet, conſiſteremus:* and yet himſelf might have ſaid, *Monitis ſum minor ipſe meis;* for it was his own fault, though not in ſo extreme a degree.

Another fault likewiſe much of this kind hath been incident to learned men; which is, that they have eſteemed the preſervation, good, and honour of their Countries or Maſters before their own fortunes or ſafeties. For ſo ſaith *Demoſthenes* unto the *Athenians: If it pleaſe you to note it, my counſels unto you are not ſuch whereby I ſhould grow great amongſt you, and you become little amongſt the* Grecians: *but they be of that nature, as they are ſometimes not good for me to give, but are always good for you to follow.* And ſo *Seneca*, after he had conſecrated that *Quinquennium Neronis* to the eternal glory of learned Governors, held on his honeſt and loyal courſe of good and free Counſel, after his Maſter grew extremely corrupt in his government. Neither can this point otherwiſe be; for Learning endueth men's minds with a true ſenſe

of the frailty of their perſons, the caſualty of their fortunes, and the dignity of their ſoul and vocation: ſo that it is impoſſible for them to eſteem that any greatneſs of their own fortune can be a true or worthy end of their being an ordainment; and therefore are deſirous to give their account to GOD, and ſo likewiſe to their Maſters under GOD (as Kings and the States that they ſerve) in theſe words; *Ecce tibi lucrefeci*, and not *Ecce mihi lucrefeci:* whereas, the corrupter ſort of mere Politicians, that have not their thoughts eſtabliſhed by Learning in the love and apprehenſion of duty, nor ever look abroad into univerſality, do refer all things to themſelves, and thruſt themſelves into the Centre of the world, as if all times ſhould meet in them and their fortunes; never caring, in all tempeſts, what becomes of the ſhip of Eſtates, ſo they may ſave themſelves in the Cockboat of their own Fortune: whereas men that feel the weight of duty, and know the limits of ſelf-love, uſe to make good their places and duties, though with peril; and if they ſtand in ſeditious and violent alterations, it is rather the reverence which many times both adverſe parts do give to honeſty, than any verſatile advantage of their own carriage. But for this point of tender ſenſe, and faſt obligation of duty, which Learning doth endue the mind withal, howſoever Fortune may tax it, and many in the depth of their corrupt principles may deſpiſe it, yet it will receive an open allowance, and therefore, needs the leſs diſproof or excuſation.

Another fault incident commonly to Learned men, which may be more probably defended than truly denied, is, that they fail ſometimes in applying themſelves to particular perſons: which want of exact application ariſeth from two cauſes; the one, becauſe the largeneſs of their mind can hardly confine itſelf to dwell in the exquiſite obſervation or examination of the Nature and cuſtoms of one perſon: for it is a ſpeech for a Lover, and not for a wiſe man: *Satis magnum alter alteri Theatrum ſumus.* Nevertheleſs I ſhall yield, that he that cannot contract the ſight of his mind, as well as diſperſe and dilate it, wanteth a great faculty. But there is a ſecond cauſe, which is no inability, but a rejection upon choice and judgment; for the honeſt and juſt bounds of obſervation, by one perſon upon another, extend no farther but to underſtand him ſufficiently, whereby not to give him offence, or whereby to be able to give him faithful Counſel, or whereby to ſtand upon reaſonable guard and caution in reſpect of a man's ſelf: but to be ſpeculative into another man, to the end to know how to work him, or wind him, or govern him, proceedeth from a heart that is double and cloven, and not entire and ingenuous; which as in friendſhip it is want of Integrity, ſo towards Princes or Superiors is want of duty. For the cuſtom of the *Levant*, which is, that ſubjects do forbear to gaze or fix their eyes upon Princes, is in the outward Ceremony barbarous, but the Moral is good: for men ought not by cunning and bent obſervations

to pierce and penetrate into the hearts of Kings, which the Scripture hath declared to be inſcrutable.

There is yet another fault (with which I will conclude this part) which is often noted in learned Men, that they do many times fail to obſerve decency and diſcretion in their behaviour and carriage, and commit errors in ſmall and ordinary points of action, ſo as the Vulgar ſort of Capacities do make a judgment of them in greater matters by that which they find wanting in them in ſmaller. But this conſequence doth often deceive men, for which I do refer them over to that which was ſaid by *Themiſtocles*, arrogantly and uncivilly being applied to himſelf out of his own mouth; but, being applied to the general ſtate of this queſtion, pertinently and juſtly; when, being invited to touch a Lute, he ſaid, *He could not fiddle, but he could make a ſmall Town a great ſtate.* So, no doubt, many may be well ſeen in the paſſages of Government and Policy, which are to ſeek in little and punctual occaſions. I refer them alſo to that which *Plato* ſaid of his Maſter *Socrates*, whom he compared to the Gallipots of Apothecaries, which on the outſide had Apes and Owls and Antiques, but contained within ſovereign and precious liquors and confections; acknowledging that to an external report he was not without ſuperficial levities and deformities, but was inwardly repleniſhed with excellent virtues and powers. And ſo much touching the point of manners of learned men.

But in the mean time I have no purpoſe to give

allowance to ſome conditions and courſes baſe and unworthy, wherein divers Profeſſors of Learning have wronged themſelves, and gone too far; ſuch as were thoſe Trencher Philoſophers, which in the later age of the *Roman* State were uſually in the houſes of great Perſons, being little better than ſolemn Paraſites; of which kind, *Lucian* maketh a merry deſcription of the Philoſopher that the great Lady took to ride with her in her Coach, and would needs have him carry her little Dog, which he doing officiouſly and yet uncomely, the Page ſcoffed, and ſaid, *That he doubted, the Philoſopher of a Stoic would turn to be a Cynic.* But above all the reſt, the groſs and palpable flattery, whereunto many not unlearned have abaſed and abuſed their wits and pens, turning, as *Du Bartas* ſaith, *Hecuba* into *Helena*, and *Fauſtina* into *Lucretia*, hath moſt diminiſhed the price and eſtimation of Learning. Neither is the modern dedication of Books and Writings, as to Patrons, to be commended: for that Books, ſuch as are worthy the name of Books, ought to have no Patrons but Truth and Reaſon. And the ancient cuſtom was to dedicate them only to private and equal friends, or to entitle the Books with their Names: or if to Kings and great perſons, it was to ſome ſuch as the argument of the Book was fit and proper for: but theſe and the like courſes may deſerve rather reprehenſion than defence.

Not that I can tax or condemn the morigeration or application of Learned men to men in fortune.

For the anſwer was good that *Diogenes* made to one that aſked him in mockery, *How it came to paſs that Philoſophers were the followers of rich men, and not rich men of Philoſophers?* He anſwered ſoberly, and yet ſharply, *Becauſe the one ſort knew what they had need of, and the other did not.* And of the like nature was the anſwer which *Ariſtippus* made, when having a petition to *Dionyſius*, and no ear given to him, he fell down at his feet; whereupon *Dionyſius* ſtaid, and gave him the hearing, and granted it; and afterward ſome perſon, tender on the behalf of Philoſophy, reproved *Ariſtippus*, that he would offer the Profeſſion of Philoſophy ſuch an indignity, as for a private Suit to fall at a Tyrant's feet: but he anſwered, *It was not his fault, but it was the fault of Dionyſius, that had his ears in his feet.* Neither was it accounted weakneſs, but diſcretion in him that would not diſpute his beſt with *Adrianus Cæſar;* excuſing himſelf, *That it was reaſon to yield to him that commanded thirty Legions.* Theſe and the like applications, and ſtooping to points of neceſſity and convenience, cannot be diſallowed; for though they may have ſome outward baſeneſs, yet in a Judgment truly made, they are to be accounted ſubmiſſions to the occaſion, and not to the perſon.

Now I proceed to thoſe errors and vanities which have intervened amongſt the ſtudies themſelves of the Learned, which is that which is principal and proper to the preſent argument; wherein my purpoſe is not to make a juſtification of the

errors, but, by a cenſure and ſeparation of the errors, to make a juſtification of that which is good and ſound, and to deliver that from the aſperſion of the other. For we ſee, that it is the manner of men to ſcandalize and deprave that which retaineth the State and virtue, by taking advantage upon that which is corrupt and degenerate: as the Heathens in the Primitive Church uſed to blemiſh and taint the Chriſtians with the faults and corruptions of Heretics. But nevertheleſs I have no meaning at this time to make any exact animadverſion of the errors and impediments in matters of Learning, which are more ſecret and remote from vulgar opinion, but only to ſpeak unto ſuch as do fall under or near unto a popular obſervation.

There be therefore chiefly three vanities in Studies, whereby Learning hath been moſt traduced. For thoſe things we do eſteem vain, which are either falſe or frivolous, thoſe which either have no truth, or no uſe: and thoſe perſons we eſteem vain, which are either credulous or curious; and curioſity is either in matter or words: ſo that in reaſon, as well as in experience, there fall out to be theſe three diſtempers, as I may term them, of learning; the firſt, fantaſtical learning; the ſecond, contentious learning; and the laſt, delicate learning; vain imaginations, vain Altercations, and vain affectations; and with the laſt I will begin. *Martin Luther* conducted no doubt by a higher Providence, but in diſcourſe of reaſon, finding what a Province he had undertaken againſt the Biſhop

of *Rome* and the degenerate traditions of the Church, and finding his own ſolitude, being no ways aided by the opinions of his own time, was enforced to awake all Antiquity, and to call former times to his ſuccour, to make a party againſt the preſent time. So that the ancient Authors, both in Divinity and in Humanity, which had long time ſlept in Libraries, began generally to be read and revolved. This by conſequence did draw on a neceſſity of a more exquiſite travail in the languages original, wherein thoſe authors did write, for the better underſtanding of thoſe Authors, and the better advantage of preſſing and applying their words. And thereof grew again a delight in their manner of Style and Phraſe, and an admiration of that kind of Writing; which was much furthered and precipitated by the enmity and oppoſition that the propounders of thoſe primitive, but ſeeming new opinions, had againſt the Schoolmen; who were generally of the contrary part, and whoſe Writings were altogether in a different Style and Form; taking liberty to coin and frame new terms of Art to expreſs their own ſenſe, and to avoid circuit of ſpeech, without regard to the pureneſs, pleaſantneſs, and, as I may call it, lawfulneſs of the Phraſe or Word. And again, becauſe the great labour that then was with the people, (of whom the *Phariſees* were wont to ſay, *Execrabilis iſta turba, quæ non novit legem*), for the winning and purſuading of them, there grew of neceſſity in chief

price and requeſt eloquence and variety of diſcourſe, as the fitteſt and forcibleſt acceſs into the capacity of the vulgar ſort; ſo that theſe four cauſes concurring, the admiration of ancient Authors, the hate of the Schoolmen, the exact ſtudy of Languages, and the efficacy of Preaching, did bring in an affectionate ſtudy of eloquence and *copia* of ſpeech, which then began to flouriſh. This grew ſpeedily to an exceſs; for men began to hunt more after Words than matter; and more after the choiceneſs of the Phraſe, and the round and clean compoſition of the ſentence, and the ſweet falling of the clauſes, and the varying and illuſtration of their works with tropes and figures, than after the weight of matter, worth of ſubject, ſoundneſs of argument, life of invention, or depth of Judgment. Then grew the flowing and watery vein of *Oſorius*, the *Portugal* Biſhop, to be in price. Then did *Sturmius* ſpend ſuch infinite and curious pains upon *Cicero* the Orator, and *Hermogenes* the Rhetorician, beſides his own Books of Periods, and imitation, and the like. Then did *Car* of *Cambridge*, and *Aſcham*, with their Lectures and Writings, almoſt deify *Cicero* and *Demoſthenes*, and allure all young men that were ſtudious, unto that delicate and poliſhed kind of Learning. Then did *Eraſmus* take occaſion to make the ſcoffing Echo: *Decem annos conſumpſi in legendo Cicerone;* and the Echo anſwered in *Greek*, Ονε, *Aſine*. Then grew the Learning of the Schoolmen to be utterly deſpiſed

as barbarous. In ſum, the whole inclination and bent of thoſe times was rather towards *copia* than weight.

Here therefore, is the firſt diſtemper of Learning, when men ſtudy words, and not matter; whereof though I have repreſented an example of late times, yet it hath been, and will be *Secundum majus et minus* in all time. And how is it poſſible but this ſhould have an operation to diſcredit Learning, even with Vulgar capacities, when they ſee Learned men's works like the firſt Letter of a Patent or limned Book; which though it hath large flouriſhes, yet it is but a letter? It ſeems to me that *Pygmalion's* frenzy is a good emblem or portraiture of this vanity: for words are but the Images of matter; and except they have life of reaſon and invention, to fall in love with them is all one as to fall in love with a Picture.

But yet, notwithſtanding, it is a thing not haſtily to be condemned, to clothe and adorn the obſcurity, even of Philoſophy itſelf, with ſenſible and plauſible elocution; for hereof we have great examples in *Xenophon*, *Cicero*, *Seneca*, *Plutarch*, and of *Plato* alſo in ſome degree; and hereof likewiſe there is great uſe: for ſurely, to the ſevere inquiſition of truth, and the deep progreſs into Philoſophy, it is ſome hinderance; becauſe it is too early ſatisfactory to the mind of man, and quencheth the deſire of further ſearch, before we come to a juſt period: but then if a man be to have any uſe of ſuch knowledge in civil occaſions, of conference,

counſel, perſuaſion, diſcourſe, or the like; then ſhall he find it prepared to his hands in thoſe Authors which write in that manner. But the exceſs of this is ſo juſtly contemptible, that as *Hercules*, when he ſaw the Image of *Adonis*, *Venus'* *Minion*, in a Temple, ſaid in diſdain, *Nil ſacri es;* ſo there is none of *Hercules'* followers in learning, that is, the more ſevere and laborious ſort of Inquirers into truth, but will deſpiſe thoſe delicacies and affectations, as indeed capable of no divineneſs. And thus much of the firſt diſeaſe or diſtemper of learning.

The ſecond, which followeth, is in nature worſe than the former: for as ſubſtance of matter is better than beauty of words, ſo, contrariwiſe, vain matter is worſe than vain words: wherein it ſeemeth the reprehenſion of St. *Paul* was not only proper for thoſe times, but prophetical for the times following; and not only reſpective to Divinity, but extenſive to all knowledge: *Devita profanas vocum novitates, et oppoſitiones falſi nominis ſcientiæ*, For he aſſigneth two Marks and Badges of ſuſpected and falſified Science: the one, the novelty and ſtrangeneſs of terms; the other, the ſtrictneſs of poſitions, which of neceſſity doth induce oppoſitions, and ſo queſtions and altercations. Surely, like as many ſubſtances in nature, which are ſolid, do putrify and corrupt into Worms; ſo it is the property of good and ſound knowledge, to putrify and diſſolve into a number of ſubtle, idle, unwholeſome, and, as I may term them, Vermiculate queſtions, which have indeed a kind of quickneſs, and

life of ſpirit, but no ſoundneſs of matter, or goodneſs of quality. This kind of degenerate Learning did chiefly reign amongſt the Schoolmen: who having ſharp and ſtrong Wits, and abundance of leiſure, and ſmall variety of reading, (but their wits being ſhut up in the Cells of a few Authors, chiefly *Ariſtotle* their Dictator, as their perſons were ſhut up in the Cells of Monaſteries and Colleges,) and knowing little Hiſtory, either of Nature or time, did, out of no great quantity of matter, and infinite agitation of Wit, ſpin out unto us thoſe laborious Webs of Learning, which are extant in their Books. For the wit and mind of man, if it work upon matter, which is the contemplation of the creatures of God, worketh according to the ſtuff, and is limited thereby; but if it work upon itſelf, as the Spider worketh his web, then it is endleſs, and brings forth indeed Cobwebs of learning, admirable for the fineneſs of thread and work, but of no ſubſtance or profit.

This ſame unprofitable ſubtilty or curioſity is of two ſorts; either in the ſubject itſelf that they handle, when it is a fruitleſs ſpeculation or controverſy, whereof there are no ſmall number both in Divinity and Philoſophy, or in the manner or method of handling of a knowledge, which amongſt them was this; upon every particular poſition or aſſertion to frame objections, and to thoſe objections, ſolutions; which ſolutions were for the moſt part not confutations, but diſtinctions: whereas indeed the ſtrength of all Sciences is, as the ſtrength

of the old man's fagot, in the band. For the harmony of a ſcience, ſupporting each part the other, is and ought to be the true and brief confutation and ſuppreſſion of all the ſmaller ſort of objections. But, on the other ſide, if you take out every Axiom, as the ſticks of the fagot, one by one, you may quarrel with them, and bend them, and break them at your pleaſure: ſo that, as was ſaid of *Seneca*, *Verborum minutiis rerum frangit pondera;* ſo a man may truly ſay of the Schoolmen, *Quæſtionum minutiis, Scientiarum frangunt ſoliditatem.* For were it not better for a man in a fair room to ſet up one great light, or branching candleſtick of lights, than to go about with a ſmall watch candle into every corner? And ſuch is their method, that reſts not ſo much upon evidence of truth proved by arguments, authorities, ſimilitudes, examples, as upon particular confutations and ſolutions of every ſcruple, cavillation, and objection; breeding for the moſt part one queſtion, as faſt as it ſolveth another; even as in the former reſemblance, when you carry the light into one corner, you darken the reſt; ſo that the Fable and fiction of *Scylla* ſeemeth to be a lively Image of this kind of Philoſophy or knowledge; who was transformed into a comely Virgin for the upper parts; but then *Candida ſuccinctam latrantibus inguina monſtris:* ſo the Generalities of the Schoolmen are for a while good and proportionable; but then, when you deſcend into their diſtinctions and deciſions, inſtead of a fruitful womb, for the uſe and benefit of man's life, they

end in monſtrous altercations and barking queſtions. So as it is not poſſible but this quality of knowledge muſt fall under popular contempt, the people being apt to contemn truth upon occaſion of Controverſies and altercations, and to think they are all out of their way which never meet: and when they ſee ſuch digladiation about ſubtilties, and matters of no uſe or moment, they eaſily fall upon that judgment of *Dionyſius* of *Syracuſe*, *Verba iſta ſunt ſenum otioſorum.*

Notwithſtanding, certain it is that if thoſe Schoolmen, to their great thirſt of Truth and unwearied travail of wit, had joined variety and univerſality of Reading and Contemplation, they had proved excellent Lights, to the great advancement of all learning and knowledge; but as they are, they are great undertakers indeed, and fierce with dark keeping: but as in the inquiry of the divine Truth, their pride inclined to leave the Oracle of GOD's word, and to vaniſh in the mixture of their own inventions; ſo in the inquiſition of Nature, they ever left the Oracle of GOD's works, and adored the deceiving and deformed Images, which the unequal mirror of their own minds, or a few received Authors or principles, did repreſent unto them. And thus much for the ſecond diſeaſe of Learning.

For the third vice or diſeaſe of Learning, which concerneth deceit or untruth, it is of all the reſt the fouleſt; as that which doth deſtroy the eſſential form of Knowledge, which is nothing but a repreſentation of truth: for the truth of being and

the truth of knowing are one, differing no more than the direct beam and the beam reflected. This vice therefore brancheth itself into two sorts; delight in deceiving, and aptness to be deceived; imposture and credulity; which, although they appear to be of a diverse nature, the one seeming to proceed of cunning, and the other of simplicity, yet certainly they do for the most part concur: for, as the Verse noteth,

Percontatorem fugito, nam Garrulus idem est,

an inquisitive man is a prattler; so, upon the like reason, a credulous man is a deceiver: as we see it in fame, that he that will easily believe rumours, will as easily augment rumours, and add somewhat to them of his own; which *Tacitus* wisely noteth, when he saith, *Fingunt simul creduntque:* so great an affinity hath fiction and belief.

This facility of credit, and accepting or admitting things weakly authorized or warranted, is of two kinds, according to the subject: for it is either a belief of History, or, as the Lawyers speak, matter of fact; or else of matter of art and opinion. As to the former, we see the experience and inconvenience of this error in ecclesiastical History; which hath too easily received and registered reports, and narrations of Miracles wrought by Martyrs, Hermits, or Monks of the desert, and other Holy men, and their Relics, Shrines, Chapels, and Images: which though they had a passage for a time, by the ignorance of the people, the superstí-

tious ſimplicity of ſome, and the politic toleration of others holding them but as divine poeſies; yet after a period of time, when the miſt began to clear up, they grew to be eſteemed but as old wives' fables, impoſtures of the Clergy, illuſions of ſpirits, and badges of Antichriſt, to the great ſcandal and detriment of Religion.

So in natural Hiſtory, we ſee there hath not been that choice and judgment uſed as ought to have been; as may appear in the Writings of *Plinius*, *Cardanus*, *Albertus*, and divers of the *Arabians*, being fraught with much Fabulous matter, a great part not only untried, but notoriouſly untrue, to the great derogation of the credit of natural Philoſophy with the grave and ſober kind of wits: wherein the wiſdom and integrity of *Ariſtotle* is worthy to be obſerved; that, having made ſo diligent and exquiſite a Hiſtory of living Creatures, hath mingled it ſparingly with any vain or feigned matter: and yet, on the other ſide, hath caſt all prodigious Narrations, which he thought worthy the Recording, into one Book: excellently diſcerning that matter of manifeſt truth (ſuch, whereupon obſervation and rule were to be built,) was not to be mingled or weakened with matter of doubtful credit; and yet again, that rarities and reports that ſeem incredible are not to be ſuppreſſed or denied to the memory of men.

And as for the facility of credit which is yielded to Arts and opinions, it is likewiſe of two kinds; either when too much belief is attributed to the

Arts themſelves, or to certain Authors in any Art. The Sciences themſelves, which have had better intelligence and confederacy with the imagination of man than with his reaſon, are three in number; Aſtrology, Natural Magic, and Alchemy; of which Sciences, nevertheleſs, the ends or pretences are noble. For Aſtrology pretendeth to diſcover that correſpondence or concatenation, which is between the ſuperior Globe and the inferior: Natural Magic pretendeth to call and reduce natural Philoſophy from variety of ſpeculations to the magnitude of works: and *Alchemy* pretendeth to make ſeparation of all the unlike parts of bodies, which in mixtures of nature are incorporate. But the derivations and proſecutions to theſe ends, both in the theories and in the practices, are full of Error and vanity; which the great Profeſſors themſelves have ſought to veil over and conceal by enigmatical writings, and referring themſelves to auricular traditions and ſuch other devices, to ſave the credit of Impoſtures: and yet ſurely to *Alchemy* this right is due, that it may be compared to the Huſbandman whereof *Æſop* makes the Fable; that, when he died, told his Sons, that he had left unto them gold buried under ground in his Vineyard; and they digged over all the ground, and gold they found none; but by reaſon of their ſtirring and digging the mound about the roots of their Vines, they had a great Vintage the year following: ſo aſſuredly the ſearch and ſtir to make gold hath brought to light a great number of good and fruitful inven-

tions and experiments, as well for the diſcloſing of Nature, as for the uſe of man's life.

And as for the overmuch credit that hath been given unto Authors in Sciences, in making them Dictators, that their words ſhould ſtand, and not Counſels, to give advice; the damage is infinite that Sciences have received thereby, as the principal cauſe that hath kept them low, at a ſtay without growth or advancement. For hence it hath come, that in arts Mechanical the firſt deviſer comes ſhorteſt, and time addeth and perfecteth; but in Sciences the firſt Author goeth fartheſt, and time leeſeth and corrupteth. So, we ſee, Artillery, ſailing, printing, and the like, were groſſly managed at the firſt, and by time accommodated and refined: but contrariwiſe, the Philoſophies and Sciences of *Ariſtotle*, *Plato*, *Democritus*, *Hippocrates*, *Euclides*, *Archimedes*, of moſt vigour at the firſt and by time degenerate and imbaſed; whereof the reaſon is no other, but that in the former many wits and induſtries have contributed in one; and in the latter many wits and induſtries have been ſpent about the wit of ſome one, whom many times they have rather depraved than illuſtrated. For as water will not aſcend higher than the level of the firſt ſpring-head from whence it deſcendeth, ſo knowledge derived from *Ariſtotle*, and exempted from liberty of examination, will not riſe again higher than the knowledge of *Ariſtotle*. And therefore although the poſition be good, *Oportet diſcentem*, *credere*, yet it muſt be coupled with this, *Oportet edoctum*

judicare; for Diſciples do owe unto Maſters only a temporary belief, and a ſuſpenſion of their own judgment until they be fully inſtructed, and not an abſolute reſignation, or perpetual captivity: and therefore, to conclude this point, I will ſay no more, but ſo let great Authors have their due, as time, which is the Author of Authors, be not deprived of his due, which is, further and further to diſcover truth.

Thus have I gone over theſe three diſeaſes of learning; beſides the which, there are ſome other rather peccant humours than formed diſeaſes: which nevertheleſs are not ſo ſecret and intrinſic, but that they fall under a popular obſervation and traducement, and therefore are not to be paſſed over.

The firſt of theſe is the extreme affecting of two extremities; the one Antiquity, the other Novelty; wherein it ſeemeth the children of time do take after the nature and malice of the father. For as he devoureth his children, ſo one of them ſeeketh to devour and ſuppreſs the other; while Antiquity envieth there ſhould be new additions, and Novelty cannot be content to add, but it muſt deface: ſurely, the advice of the Prophet is the true direction in this matter, *State ſuper vias antiquas, et videte quænam ſit via recta et bona, et ambulate in ea.* Antiquity deſerveth that reverence, that men ſhould make a ſtand thereupon, and diſcover what is the beſt way; but when the diſcovery is well taken, then to make progreſſion. And to ſpeak truly,

Antiquitas ſæculi Juventus Mundi. Theſe times are the ancient times, when the world is ancient, and not thoſe which we account ancient *Ordine retrogrado*, by a computation backward from ourſelves.

Another Error, induced by the former, is a diſtruſt that any thing ſhould be now to be found out, which the World ſhould have miſſed and paſſed over, ſo long time; as if the ſame objection were to be made to time, that *Lucian* maketh to *Jupiter* and other the heathen Gods; of which he wondereth that they begot ſo many Children in old time, and begot none in his time; and aſketh whether they were become ſeptuagenary, or whether the Law *Papia*, made againſt old men's Marriages, had reſtrained them. So it ſeemeth men doubt leſt time is become paſt children and Generation; wherein, contrariwiſe, we ſee commonly the levity and inconſtancy of men's judgments, which, till a matter be done, wonder that it can be done; and, as ſoon as it is done, wonder again that it was no ſooner done: as we ſee in the expedition of *Alexander* into *Aſia*, which at firſt was prejudged as a vaſt and impoſſible enterpriſe: and yet afterwards it pleaſeth *Livy* to make no more of it than this: *Nil aliud quàm bene auſus vana contemnere:* and the ſame happened to *Columbus* in the Weſtern Navigation. But in intellectual matters it is much more common; as may be ſeen in moſt of the propoſitions of *Euclid:* which till they be demonſtrate, they ſeem ſtrange to our aſſent; but being demonſtrate,

our mind accepteth of them by a kind of relation, as the Lawyers ſpeak,) as if we had known them before.

Another Error, that hath alſo ſome affinity with the former, is a conceit that of former opinions or ſects, after variety and examination, the beſt hath ſtill prevailed, and ſuppreſſed the reſt; ſo as, if a man ſhould begin the labour of a new ſearch, he were but like to light upon ſomewhat formerly rejected, and by rejection brought into oblivion: as if the multitude, or the wiſeſt for the multitude's ſake, were not ready to give paſſage rather to that which is popular and ſuperficial, than to that which is ſubſtantial and profound; for the truth is, that time ſeemeth to be of the nature of a River or ſtream, which carrieth down to us that which is light and blown up, and ſinketh and drowneth that which is weighty and ſolid.

Another Error, of a diverſe nature from all the former, is the over early and peremptory reduction of knowledge into Arts and Methods; from which time commonly Sciences receive ſmall or no augmentation. But as young men, when they knit and ſhape perfectly, do ſeldom grow to a further ſtature; ſo knowledge, while it is in Aphoriſms and obſervations, it is in growth: but when it once is comprehended in exact Methods, it may perchance be further poliſhed and illuſtrated, and accommodated for uſe and practice; but it increaſeth no more in bulk and ſubſtance.

Another Error which doth ſucceed that which

we laſt mentioned, is, that after the diſtribution of particular Arts and Sciences, men have abandoned univerſality, or *Philoſophia prima:* which cannot but ceaſe and ſtop all progreſſion. For no perfect diſcovery can be made upon a flat or a level: neither is it poſſible to diſcover the more remote and deeper parts of any Science, if you ſtand but upon the level of the ſame Science, and aſcend not to a higher Science.

Another Error hath proceeded from too great a reverence, and a kind of adoration of the mind and underſtanding of man; by means whereof, men have withdrawn themſelves too much from the contemplation of Nature, and the obſervations of experience, and have tumbled up and down in their own reaſon and conceits. Upon theſe Intellectualiſts, which are, notwithſtanding, commonly taken for the moſt ſublime and divine Philoſophers, *Heraclitus* gave a juſt cenſure, ſaying, *Men ſought truth in their own little worlds, and not in the great and common world;* for they diſdain to ſpell, and ſo by degrees to read in the volume of God's works: and contrariwiſe, by continual meditation, and agitation of wit, do urge and as it were invocate their own ſpirits to divine, and give Oracles unto them, whereby they are deſervedly deluded.

Another Error that hath ſome connexion with this latter, is, that men have uſed to infect their meditations, opinions, and doctrines, with ſome conceits which they have moſt admired, or ſome

Sciences which they have moſt applied; and given all things elſe a tincture according to them, utterly untrue and improper. So hath *Plato* intermingled his Philoſophy with Theology, and *Ariſtotle* with Logic; and the ſecond School of *Plato*, *Proclus* and the reſt, with the Mathematics. For theſe were the Arts which had a kind of *Primogeniture* with them ſeverally. So have the Alchymiſts made a Philoſophy out of a few experiments of the Furnace; and *Gilbertus*, our Countryman, hath made a Philoſophy out of the obſervations of a Loadſtone. So *Cicero*, when, reciting the ſeveral opinions of the nature of the ſoul, he found a Muſician that held the ſoul was but a Harmony, ſaith pleaſantly, *Hic ab arte ſua non receſſit*, &c. But of theſe conceits *Ariſtotle* ſpeaketh ſeriouſly and wiſely, when he ſaith, *Qui reſpiciunt ad pauca de facili pronunciant.*

Another Error is an impatience of doubt, and haſte to aſſertion without due and mature ſuſpenſion of judgment. For the two ways of contemplation are not unlike the two ways of action, commonly ſpoken of by the Ancients; the one plain and ſmooth in the beginning, and in the end impaſſable; the other rough and troubleſome in the entrance, but after a while fair and even: ſo it is in contemplation; if a man will begin with certainties, he ſhall end in doubts; but if he will be content to begin with doubts, he ſhall end in certainties.

Another Error is in the manner of the tradition

and delivery of Knowledge, which is for the moſt part Magiſtral and peremptory, and not ingenuous and faithful; in a ſort as may be ſooneſt believed, and not eaſilieſt examined. It is true, that in compendious Treatiſes for practice, that form is not to be diſallowed: but in the true handling of knowledge, men ought not to fall, either, on the one ſide, into the Vein of *Velleius* the Epicurean: *Nil tam metuens, quàm ne dubitare aliqua de re videretur:* nor, on the other ſide, into *Socrates'* ironical doubting of all things; but to propound things ſincerely, with more or leſs aſſeveration, as they ſtand in a man's own judgment proved more or leſs.

Other Errors there are in the ſcope that men propound to themſelves, whereunto they bend their endeavours; for whereas the more conſtant and devoted kind of Profeſſors of any ſcience ought to propound to themſelves to make ſome additions to their Science, they convert their labours to aſpire to certain ſecond prizes: as to be a profound Interpreter or Commentor, to be a ſharp Champion or Defender, to be a methodical Compounder or Abridger, and ſo the Patrimony of knowledge cometh to be ſometimes improved, but ſeldom augmented.

But the greateſt Error of all the reſt is the miſtaking or miſplacing of the laſt or furtheſt end of Knowledge: for men have entered into a deſire of Learning and Knowledge, ſometimes upon a natural curioſity, and inquiſitive appetite; ſometimes to entertain their minds with variety and delight;

ſometimes for ornament and reputation; and ſometimes to enable them to victory of wit and contradiction; and moſt times for lucre and profeſſion; and ſeldom ſincerely to give a true account of their gift of reaſon, to the benefit and uſe of men: as if there were ſought in knowledge a Couch, whereupon to reſt a ſearching and reſtleſs ſpirit; or a tarraſſe for a wandering and variable mind to walk up and down with a fair proſpect; or a Tower of State, for a proud mind to raiſe itſelf upon; or a Fort or commanding ground, for ſtrife and contention; or a Shop, for profit or ſale; and not a rich Storehouſe, for the glory of the Creator, and the relief of Man's eſtate. But this is that which will indeed dignify and exalt knowledge, if contemplation and action may be more nearly and ſtraitly conjoined and united together than they have been; a Conjunction like unto that of the two higheſt Planets, *Saturn*, the Planet of reſt and contemplation, and *Jupiter*, the Planet of civil ſociety and action: howbeit, I do not mean, when I ſpeak of uſe and action, that end before-mentioned of the applying of knowledge to lucre and profeſſion; for I am not ignorant how much that diverteth and interrupteth the proſecution and advancement of knowledge, like unto the golden ball thrown before *Atalanta*, which while ſhe goeth aſide and ſtoopeth to take up, the race is hindered;

Declinat curſus, aurumque volubile tollit.

Neither is my meaning, as was ſpoken of *So-*

crates, to call Philoſophy down from heaven to converſe upon the earth; that is, to leave natural Philoſophy aſide, and to apply knowledge only to manners and policy. But as both heaven and earth do conſpire and contribute to the uſe and benefit of man; ſo the end ought to be, from both Philoſophies to ſeparate and reject vain ſpeculations, and whatſoever is empty and void, and to preſerve and augment whatſoever is ſolid and fruitful: that knowledge may not be, as a Curteſan, for pleaſure and vanity only, or as a bond-woman, to acquire and gain to her Maſter's uſe; but as a Spouſe, for generation, fruit, and comfort.

Thus have I deſcribed and opened, as by a kind of diſſection, thoſe peccant humours, (the principal of them,) which have not only given impediment to the proficience of Learning, but have given alſo occaſion to the traducement thereof: wherein if I have been too plain, it muſt be remembered, *Fidelia vulnera amantis, ſed doloſa oſcula malignantis.* This, I think, I have gained, that I ought to be the better believed in that which I ſhall ſay pertaining to commendation; becauſe I have proceeded ſo freely in that which concerneth cenſure. And yet I have no purpoſe to enter into a laudative of Learning, or to make a Hymn to the muſes; (though I am of opinion that it is long ſince their rites were duly celebrated:) but my intent is, without varniſh or amplification, juſtly to weigh the dignity of knowledge in the balance with other

things, and to take the true value thereof by teſtimonies and arguments divine and human.

Firſt, therefore, let us ſeek the dignity of knowledge in the Archetype or firſt platform, which is in the attributes and acts of GOD, as far as they are revealed to man, and may be obſerved with ſobriety; wherein we may not ſeek it by the name of Learning; for all learning is knowledge acquired, and all knowledge in GOD is original: and therefore we muſt look for it by another name, that of wiſdom or ſapience, as the Scriptures call it.

It is ſo then, that in the work of the Creation we ſee a double emanation of virtue from GOD; the one referring more properly to power, the other to wiſdom; the one expreſſed in making the ſubſiſtence of the matter, and the other in diſpoſing the beauty of the form. This being ſuppoſed, it is to be obſerved, that for anything which appeareth in the Hiſtory of the Creation, the confuſed Maſs and matter of Heaven and earth was made in a moment; and the order and diſpoſition of that *Chaos* or Maſs was the Work of ſix days; ſuch a note of difference it pleaſed GOD to put upon the Works of power, and the works of Wiſdom; wherewith concurreth, that in the former it is not ſet down that GOD ſaid, *Let there be Heaven and Earth*, as it is ſet down of the works following; but actually, that GOD made Heaven and Earth: the one carrying the ſtyle of a Manufacture, and the other of a Law, Decree, or Counſel.

To proceed to that which is next in order from God to ſpirits; we find, as far as credit is to be given to the celeſtial Hierarchy of that ſuppoſed *Dionyſius* the Senator of *Athens*, the firſt place or degree is given to the Angels of love, which are termed *Seraphim;* the ſecond to the Angels of light, which are termed *Cherubim;* and the third, and ſo following places, to thrones, principalities, and the reſt, which are all Angels of power and miniſtry; ſo as the Angels of knowledge and illumination are placed before the Angels of Office and domination.

To deſcend from ſpirits and intellectual forms to ſenſible and material forms; we read the firſt form that was created was Light, which hath a relation and correſpondence in nature and corporal things to knowledge in Spirits and incorporal things.

So in the diſtribution of days, we ſee, the day wherein God did reſt, and contemplate his own works, was bleſſed above all the days wherein he did effect and accompliſh them.

After the Creation was finiſhed, it is ſet down unto us, that Man was placed in the Garden to work therein; which work, ſo appointed to him, could be no other than work of contemplation; that is, when the end of work is but for exerciſe and experiment, not for neceſſity; for there being then no reluctation of the Creature, nor ſweat of the brow, man's employment muſt of conſequence have been matter of delight in the experiment, and

not matter of labour for the uſe. Again, the firſt Acts which man performed in Paradiſe conſiſted of the two ſummary parts of Knowledge; the view of Creatures, and the impoſition of Names. As for the Knowledge which induced the fall, it was, as was touched before, not the natural Knowledge of Creatures, but the moral Knowledge of good and evil; wherein the ſuppoſition was, that GOD's Commandments or prohibitions were not the originals of good and evil, but that they had other beginnings, which Man aſpired to know; to the end to make a total defection from GOD, and to depend wholly upon himſelf.

To paſs on: in the firſt event or occurrence after the fall of Man, we ſee, (as the Scriptures have infinite Myſteries, not violating at all the truth of the Story or letter,) an Image of the two Eſtates, the Contemplative State and the Active State, figured in the two perſons of *Abel* and *Cain*, and in the two ſimpleſt and moſt primitive Trades of life; that of the Shepherd, (who, by reaſon of his leiſure, reſt in a place, and living in view of heaven, is a lively Image of a contemplative life,) and that of the Huſbandman: where we ſee again the favour and election of GOD went to the Shepherd, and not to the tiller of the ground.

So in the age before the flood, the holy Records within thoſe few memorials which are there entered and regiſtered, have vouchſafed to mention and honour the name of the Inventors and Authors of Muſic and works in Metal. In the age after the

Flood, the firſt great judgment of GOD upon the ambition of Man was the confuſion of Tongues; whereby the open Trade and intercourſe of Learning and Knowledge was chiefly imbarred.

To deſcend to *Moſes* the Lawgiver, and GOD's firſt pen: he is adorned by the Scriptures with this addition and commendation, *That he was ſeen in all the Learning of the* Egyptians; which Nation, we know, was one of the moſt ancient Schools of the world: for ſo *Plato* brings in the *Egyptian* Prieſt ſaying unto *Solon: You Grecians are ever Children; you have no knowledge of antiquity, nor antiquity of knowledge.* Take a view of the ceremonial Law of *Moſes;* you ſhall find, beſides the prefiguration of CHRIST, the badge or difference of the people of GOD, the exerciſe and impreſſion of obedience, and other divine uſes and fruits thereof, that ſome of the moſt learned *Rabbins* have travelled profitably and profoundly to obſerve, ſome of them a natural, ſome of them a moral ſenſe, or reduction of many of the ceremonies and ordinances. As in the Law of the Leproſy, where it is ſaid, *If the whiteneſs have overſpread the fleſh, the Patient may paſs abroad for clean; but if there be any whole fleſh remaining, he is to be ſhut up for unclean;* one of them noteth a principle of nature, that putrefaction is more contagious before maturity than after: and another noteth a poſition of moral Philoſophy, that men abandoned to vice, do not ſo much corrupt manners, as thoſe that are half good and half-evil. So in this and very many

other places in that Law, there is to be found, beſides the Theological ſenſe, much aſperſion of Philoſophy.

So likewiſe in that excellent Book of *Job*, if it be revolved with diligence, it will be found pregnant and ſwelling with natural Philoſophy; as for example, Coſmography, and the roundneſs of the World, *Qui extendit aquilonem ſuper vacuum, et appendit terram ſuper nihilum;* wherein the penſileneſs of the Earth, the pole of the North, and the finiteneſs or convexity of Heaven are manifeſtly touched; ſo again, matter of Aſtronomy; *Spiritus ejus ornavit Cœlos, et obſtetricante manu ejus eductus eſt Coluber tortuoſus.* And in another place; *Nunquid conjungere valebis micantes ſtellas Pleiadas, aut gyrum Arcturi poteris diſſipare?* Where the fixing of the Stars, ever ſtanding at equal diſtance, is with great elegancy noted. And in another place, *Qui facit Arcturum, et Oriona, et Hyadas, et interiora Auſtri;* where again he takes knowledge of the depreſſion of the Southern Pole, calling it the ſecrets of the South, becauſe the Southern Stars were in that climate unſeen. Matter of generation; *Annon ſicut lac mulſiſti me, et ſicut caſeum coagulaſti me? &c.* Matter of Minerals; *Habet argentum venarum ſuarum principia: et auro locus eſt in quo conflatur, ferrum de terra tollitur, et lapis ſolutus calore in æs vertitur:* and ſo forwards in that Chapter.

So likewiſe in the perſon of *Solomon* the King, we ſee the gift or endowment of Wiſdom and

Learning, both in *Solomon's* petition, and in GOD's aſſent thereunto, preferred before all other terrene and temporal felicity. By virtue of which grant or donative of GOD, *Solomon* became enabled, not only to write thoſe excellent Parables, or Aphoriſms concerning Divine and Moral Philoſophy; but alſo to compile a natural Hiſtory of all verdure, from the Cedar upon the Mountain to the Moſs upon the wall, (which is but a rudiment between putrefaction and a herb,) and alſo of all things that breathe or move. Nay, the ſame *Solomon* the King, although he excelled in the glory of Treaſure and magnificent buildings, of ſhipping and Navigation, of ſervice and attendance, of fame and renown, and the like, yet he maketh no claim to any of thoſe glories, but only to the glory of Inquiſition of Truth; for ſo he ſaith expreſſly, *The glory of* GOD *is to conceal a thing, but the glory of the King is to find it out;* as if, according to the innocent play of Children, the Divine Majeſty took delight to hide his works, to the end to have them found out; and as if Kings could not obtain a greater honour than to be GOD's playfellows in that game; conſidering the great commandment of wits and means, whereby nothing needeth to be hidden from them.

Neither did the diſpenſation of GOD vary in the times after our Saviour came into the world; for our Saviour himſelf did firſt ſhew his power to ſubdue ignorance, by his conference with the Prieſts and Doctors of the Law, before he ſhewed his power to ſubdue nature by his miracles. And the

coming of the Holy Spirit was chiefly figured and expreſſed in the ſimilitude and gift of tongues, which are but *Vehicula ſcientiæ.*

So in the election of thoſe Inſtruments, which it pleaſed GOD to uſe for the plantation of the Faith, notwithſtanding that at the firſt he did employ perſons altogether unlearned, otherwiſe than by inſpiration, more evidently to declare his immediate working, and to abaſe all human Wiſdom or Knowledge; yet, nevertheleſs, that Counſel of his was no ſooner performed, but in the next viciſſitude and ſucceſſion he did ſend his Divine truth into the world, waited on with other Learnings, as with Servants or Handmaids: for ſo we ſee St. *Paul*, who was the only learned amongſt the Apoſtles, had his pen moſt uſed in the Scriptures of the New Teſtament.

So again, we find that many of the ancient Biſhops and Fathers of the Church were excellently read, and ſtudied in all the learning of the Heathen; inſomuch, that the Edict of the Emperor *Julianus*, whereby it was interdicted unto Chriſtians to be admitted into Schools, Lectures, or exerciſes of Learning, was eſteemed and accounted a more pernicious engine and machination againſt the Chriſtian Faith, than were all the ſanguinary proſecutions of his Predeceſſors; neither could the emulation and Jealouſy of *Gregory* the Firſt of that name, Biſhop of *Rome*, ever obtain the opinion of piety or devotion; but contrariwiſe received the cenſure of humour, malignity, and puſillanimity, even amongſt

holy men; in that he deſigned to obliterate and extinguiſh the memory of Heathen antiquity and Authors. But contrariwiſe, it was the Chriſtian Church, which, amidſt the inundations of the *Scythians* on the one ſide from the North-weſt, and the *Saracens* from the Eaſt, did preſerve in the ſacred lap and boſom thereof, the precious Relics even of Heathen Learning, which otherwiſe had been extinguiſhed, as if no ſuch thing had ever been.

And we ſee before our eyes, that in the age of ourſelves and our Fathers, when it pleaſed GOD to call the Church of *Rome* to account for their degenerate manners and ceremonies, and ſundry doctrines obnoxious, and framed to uphold the ſame abuſes; at one and the ſame time it was ordained by the Divine Providence, that there ſhould attend withal a renovation and new ſpring of all other knowledges: and, on the other ſide we ſee the Jeſuits, (who partly in themſelves, and partly by the emulation and provocation of their example, have much quickened and ſtrengthened the ſtate of Learning,) we ſee, I ſay, what notable ſervice and reparation they have done to the *Roman* See.

Wherefore, to conclude this part, let it be obſerved, that there be two principal duties and ſervices, beſides ornament and illuſtration, which Philoſophy and human Learning do perform to faith and Religion. The one, becauſe they are an effectual inducement to the exaltation of the glory of GOD: For as the Pſalms and other Scriptures do

often invite us to conſider and magnify the great and wonderful works of GOD; ſo if we ſhould reſt only in the contemplation of the exterior of them, as they firſt offer themſelves to our ſenſes, we ſhould do a like injury unto the Majeſty of GOD, as if we ſhould judge or conſtrue of the ſtore of ſome excellent Jeweller, by that only which is ſet out toward the ſtreet in his ſhop. The other, becauſe they miniſter a ſingular help and preſervative againſt unbelief and error: for our Saviour ſaith, *You err, not knowing the Scriptures, nor the power of* GOD; laying before us two Books or volumes to ſtudy, if we will be ſecured from error; firſt, the Scriptures, revealing the will of GOD; and then the creatures expreſſing his power; whereof the latter is a key unto the former: not only opening our underſtanding to conceive the true ſenſe of the Scriptures, by the general notions of reaſon and rules of ſpeech; but chiefly opening our belief, in drawing us into a due meditation of the omnipotency of GOD, which is chiefly ſigned and engraven upon his works. Thus much therefore for divine teſtimony and evidence concerning the true dignity and value of Learning.

As for human proofs, it is ſo large a field, as, in a diſcourſe of this nature and brevity, it is fit rather to uſe choice of thoſe things which we ſhall produce, than to embrace the variety of them. Firſt, therefore, in the degrees of human honour amongſt the heathen, it was the higheſt to obtain to a veneration and adoration as a GOD. This unto

the Chriſtians is as the forbidden fruit. But we ſpeak now ſeparately of human teſtimony: according to which, that which the *Grecians* call *Apotheoſis*, and the *Latins*, *relatio inter divos*, was the ſupreme honour which man could attribute unto man: eſpecially when it was given, not by a formal Decree or Act of State, as it was uſed among the *Roman* Emperors, but by an inward aſſent and belief. Which honour, being ſo high, had alſo a degree or middle Term: for there were reckoned, above human honours, honours Heroical and Divine: in the attribution and diſtribution of which honours, we ſee, Antiquity made this difference: that whereas Founders and Uniters of States and Cities, Lawgivers, extirpers of Tyrants, Fathers of the people, and other eminent perſons in civil merit, were honoured but with the Titles of Worthies or Demi-gods; ſuch as were *Hercules*, *Theſeus*, *Minos*, *Romulus*, and the like: on the other ſide, ſuch as were Inventors and Authors of new Arts, endowments, and commodities towards man's life, were ever Conſecrated amongſt the gods themſelves; as were *Ceres*, *Bacchus*, *Mercurius*, *Apollo*, and others: and juſtly; for the merit of the former is confined within the Circle of an age or a nation; and is like fruitful ſhowers, which though they be profitable and good, yet ſerve but for that ſeaſon, and for a latitude of ground where they fall; but the other is indeed like the benefits of Heaven, which are permanent and univerſal. The former, again, is mixed with ſtrife and perturbation; but the latter

hath the true Character of Divine preſence, coming in *aura leni*, without noiſe or agitation.

Neither is certainly that other merit of learning, in repreſſing the inconveniences which grow from man to man, much inferior to the former, of relieving the neceſſities which ariſe from nature; which merit was lively ſet forth by the Ancients in that feigned Relation of *Orpheus's* Theatre, where all beaſts and birds aſſembled; and, forgetting their ſeveral appetites, ſome of prey, ſome of game, ſome of quarrel, ſtood all ſociably together liſtening to the airs and accords of the Harp; the ſound whereof no ſooner ceaſed, or was drowned by ſome louder noiſe, but every beaſt returned to his own nature: wherein is aptly deſcribed the nature and condition of men, who are full of ſavage and unreclaimed deſires of profit, of luſt, of Revenge; which as long as they give ear to precepts, to Laws, to Religion, ſweetly touched with eloquence and perſuaſion of Books, of Sermons, of harangues, ſo long is ſociety and peace maintained; but if theſe inſtruments be ſilent, or that ſedition and tumult make them not audible, all things diſſolve into Anarchy and Confuſion.

But this appeareth more manifeſtly, when Kings themſelves, or perſons of authority under them, or other Governors in Commonwealths and popular Eſtates, are endued with Learning. For although he might be thought partial to his own profeſſion, that ſaid, *Then ſhould people and eſtates be happy, when either Kings were Philoſophers, or Philoſo-*

phers Kings; yet ſo much is verified by experience, that under learned Princes and Governors there have been ever the beſt times: for howſoever Kings may have their imperfections in their paſſions and Cuſtoms; yet if they be illuminate by learning, they have thoſe Notions of Religion, policy, and morality, which do preſerve them, and refrain them from all ruinous and peremptory errors and exceſſes; whiſpering evermore in their ears, when Counſellors and ſervants ſtand mute and ſilent. And Senators or Counſellors likewiſe, which be Learned, do proceed upon more ſafe and ſubſtantial principles, than Counſellors which are only men of experience; the one ſort keeping dangers afar off, whereas the other diſcover them not till they come near hand, and then truſt to the agility of their wit to ward off or avoid them.

Which felicity of times under learned Princes, (to keep ſtill the Law of brevity, by uſing the moſt eminent and ſelected examples), doth beſt appear in the age which paſſed from the death of *Domitian* the Emperor until the Reign of *Commodus;* comprehending a ſucceſſion of ſix Princes, all learned, or ſingular Favourers and Advancers of Learning; which age, for temporal reſpects, was the moſt happy and flouriſhing that ever the *Roman* Empire, (which then was a model of the World,) enjoyed: a matter revealed and prefigured unto *Domitian* in a Dream the night before he was ſlain; for he thought there was grown behind upon his ſhoulders a neck and a head of Gold: which came accord-

ingly to paſs in thoſe golden times which ſucceeded: of which Princes we will make ſome commemoration; wherein although the matter will be vulgar, and may be thought fitter for a Declamation than agreeable to a Treatiſe infolded as this is, yet becauſe it is pertinent to the point in hand, *Neque ſemper arcum tendit Apollo*, and to name them only were too naked and curſory, I will not omit it altogether. The firſt was *Nerva;* the excellent temper of whoſe government is by a glance in *Cornelius Tacitus* touched to the life: *Poſtquam divus Nerva res olim inſociabiles miſcuiſſet, imperium et libertatem.* And in token of his Learning, the laſt Act of his ſhort Reign, left to memory, was a miſſive to his adopted ſon *Trajan*, proceeding upon ſome inward diſcontent at the ingratitude of the times, comprehended in a verſe of *Homer's:*

Telis, Phœbe, tuis Lacrymas ulciſcere noſtras.

Trajan, who ſucceeded, was for his perſon not Learned: but if we will hearken to the ſpeech of our Saviour, that ſaith, *He that receiveth a Prophet in the name of a Prophet, ſhall have a Prophet's reward*, he deſerveth to be placed amongſt the moſt learned Princes: for there was not a greater admirer of Learning, or Benefactor of Learning; a founder of famous Libraries, a perpetual Advancer of Learned men to office, and a familiar converſer with learned Profeſſors and Preceptors, who were noted to have then moſt credit in Court. On the other ſide, how much *Trajan's*

virtue and government was admired and renowned, ſurely no teſtimony of grave and faithful Hiſtory doth more livelily ſet forth, than that legend Tale of *Gregorius Magnus*, Biſhop of *Rome*, who was noted for the extreme envy he bore towards all Heathen excellency: and yet he is reported, out of the love and eſtimation of *Trajan's* moral virtues, to have made unto God paſſionate and fervent prayers for the delivery of his ſoul out of Hell: and to have obtained it, with a Caveat that he ſhould make no more ſuch Petitions. In this Prince's time alſo, the perſecutions againſt the Chriſtians received intermiſſion, upon the certificate of *Plinius Secundus*, a man of excellent Learning, and by *Trajan* advanced.

Adrian, his ſucceſſor, was the moſt curious man that lived, and the moſt univerſal inquirer; inſomuch as it was noted for an error in his mind, that he deſired to comprehend all things, and not to reſerve himſelf for the worthieſt things: falling into the like humour that was long before noted in *Philip* of *Macedon;* who, when he would needs over-rule and put down an excellent Muſician in an argument touching Muſic, was well anſwered by him again, *God forbid*, *Sir*, ſaith he, *that your fortune ſhould be ſo bad, as to know theſe things better than I.* It pleaſed God likewiſe to uſe the curioſity of this Emperor as an inducement to the peace of his Church in thoſe days. For having Christ in veneration, not as a God or Saviour, but as a wonder or novelty; and having his Pic-

ture in his Gallery, matched with *Apollonius*, with whom, in his vain imagination, he thought he had ſome conformity; yet it ſerved the turn to allay the bitter hatred of thoſe times againſt the Chriſtian name, ſo as the Church had peace during his time. And for his government civil, although he did not attain to that of *Trajan's* in glory of Arms, or perfection of Juſtice, yet in deſerving of the weal of the Subject he did exceed him. For *Trajan* erected many famous Monuments and buildings; inſomuch as *Conſtantine* the Great in emulation was wont to call him *Parietaria*, (Wall flower,) becauſe his name was upon ſo many walls: but his buildings and works were more of glory and triumph than uſe and neceſſity. But *Adrian* ſpent his whole Reign, which was peaceable, in a perambulation or Survey of the *Roman* Empire; giving order, and making aſſignation where he went, for re-edifying of Cities, Towns, and Forts decayed; and for cutting of Rivers and ſtreams, and for making Bridges and paſſages, and for policying of Cities and Commonalties with new ordinances and Conſtitutions, and granting new Franchiſes and incorporations; ſo that his whole time was a very reſtoration of all the lapſes and decays of former times.

Antoninus Pius, who ſucceeded him, was a Prince excellently learned; and had the patient and ſubtle wit of a Schoolman; inſomuch as in common ſpeech, which leaves no virtue untaxed, he was called *Cymini Sector*, (a Carver or divider

of Cummin,) which is one of the leaſt ſeeds; ſuch a patience he had and ſettled ſpirit, to enter into the leaſt and moſt exact differences of cauſes; a fruit no doubt of the exceeding tranquillity and ſerenity of his mind; which being no ways charged or incumbered, either with fears, remorſes, or ſcruples, but having been noted for a man of the pureſt goodneſs, without all fiction or affectation, that hath reigned or lived, made his mind continually preſent and entire. He likewiſe approached a degree nearer unto Chriſtianity, and became, as *Agrippa* ſaid unto St. *Paul*, *half a Chriſtian;* holding their Religion and Law in good opinion, and not only ceaſing perſecution, but giving way to the advancement of Chriſtians.

There ſucceeded him the firſt *Divi fratres*, the two adoptive brethren, *Lucius Commodus Verus*, (Son to *Ælius Verus*, who delighted much in the ſofter kind of Learning, and was wont to call the Poet *Martial* his *Virgil*,) and *Marcus Aurelius Antoninus;* whereof the latter, who obſcured his colleague and ſurvived him long, was named the Philoſopher: who, as he excelled all the reſt in Learning, ſo he excelled them likewiſe in perfection of all Royal virtues; inſomuch as *Julianus* the Emperor, in his book intitled *Cæſares*, being as a Paſquin or Satire to deride all his Predeceſſors, feigned that they were all invited to a Banquet of the gods, and *Silenus* the Jeſter ſat at the nether end of the Table, and beſtowed a ſcoff on every one as they came in; but when *Marcus Philoſo-*

phus came in, *Silenus* was gravelled, and out of Countenance, not knowing where to carp at him; ſave at the laſt he gave a glance at his patience towards his wife. And the virtue of this Prince, continued with that of his Predeceſſor, made the name of *Antoninus* ſo ſacred in the World, that though it were extremely diſhonoured in *Commodus*, *Caracalla*, and *Heliogabalus*, who all bore the name, yet when *Alexander Severus* refuſed the name, becauſe he was a ſtranger to the Family, the Senate with one acclamation ſaid, *Quomodo* Auguſtus, *ſic et* Antoninus. In ſuch renown and veneration was the name of theſe two Princes, in thoſe days, that they would have it as a perpetual addition in all the Emperor's ſtyles. In this Emperor's times alſo the Church for the moſt part was in peace; ſo as in this ſequence of ſix Princes we do ſee the bleſſed effects of Learning in ſovereignty, painted forth in the greateſt Table of the World.

But for a Tablet, or Picture of ſmaller volume, (not preſuming to ſpeak of your Majeſty that liveth,) in my Judgment the moſt excellent is that of Queen *Elizabeth*, your immediate Predeceſſor in this part of *Britain;* a Princeſs that, if *Plutarch* were now alive to write lives by parallels, would trouble him, I think, to find for her a parallel amongſt women. This Lady was endued with learning in her ſex ſingular, and rare even amongſt maſculine Princes; whether we ſpeak of Learning, Language, or of ſcience, modern or ancient, Divinity or Humanity: and unto the very laſt year of

her life ſhe was accuſtomed to appoint ſet hours for reading, ſcarcely any young Student in a Univerſity more daily, or more duly. As for her government, I aſſure myſelf, I ſhall not exceed, if I do affirm that this part of the Iſland never had forty-five years of better times; and yet not through the calmneſs of the ſeaſon, but through the wiſdom of her regimen. For if there be conſidered of the one ſide, the truth of Religion eſtabliſhed, the conſtant peace and ſecurity, the good adminiſtration of Juſtice, the temperate uſe of the prerogative, not ſlackened, nor much ſtrained, the flouriſhing ſtate of Learning, ſortable to ſo excellent a Patroneſs, the convenient eſtate of wealth and means, both of Crown and Subject, the habit of obedience, and the moderation of diſcontents; and there be conſidered, on the other ſide, the differences of Religion, the troubles of Neighbour Countries, the ambition of *Spain*, and oppoſition of *Rome;* and then, that ſhe was ſolitary and of herſelf: theſe things, I ſay, conſidered, as I could not have choſen an inſtance ſo recent and ſo proper, ſo, I ſuppoſe, I could not have choſen one more remarkable or eminent to the purpoſe now in hand, which is concerning the conjunction of learning in the Prince with felicity in the people.

Neither hath Learning an influence and operation only upon civil merit and moral virtue, and the Arts or temperature of peace and peaceable government; but likewiſe it hath no leſs power and efficacy in enablement towards martial and mili-

tary virtue and proweſs; as may be notably repreſented in the examples of *Alexander* the Great, and *Cæſar* the Dictator, mentioned before, but now in fit place to be reſumed; of whoſe virtues and Acts in war there needs no note or recital, having been the wonders of time in that kind: but of their affections towards learning, and perfections in learning, it is pertinent to ſay ſomewhat.

Alexander was bred and taught under *Ariſtotle* the great Philoſopher, who dedicated divers of his Books of Philoſophy unto him: he was attended with *Calliſthenes* and divers other learned perſons, that followed him in Camp, throughout his Journeys and Conqueſts. What price and eſtimation he had learning in doth notably appear in theſe three particulars: firſt, in the envy he uſed to expreſs that he bore towards *Achilles*, in this, that he had ſo good a Trumpet of his praiſes as *Homer's* verſes; ſecondly, in the judgment or ſolution he gave touching that precious Cabinet of *Darius*, which was found among his jewels; whereof queſtion was made what thing was worthy to be put into it; and he gave his opinion for *Homer's* works: thirdly, in his letter to *Ariſtotle*, after he had ſet forth his books of Nature, wherein he expoſtulated with him for publiſhing the ſecrets or Myſteries of Philoſophy; and gave him to underſtand that himſelf eſteemed it more to excel other men in Learning and knowledge than in power and Empire. And what uſe he had of learning doth appear, or rather ſhine, in all his ſpeeches and anſwers, be-

ing full of ſcience, and uſe of ſcience, and that in all variety.

And herein again it may ſeem a thing ſcholaſtical, and ſomewhat idle, to recite things that every man knoweth; but yet, ſince the argument I handle leadeth me thereunto, I am glad that men ſhall perceive I am as willing to flatter, if they will ſo call it, an *Alexander*, or a *Cæſar*, or an *Antoninus*, that are dead many hundred years ſince, as any that now liveth: for it is the diſplaying of the glory of Learning in Sovereignty that I propound to myſelf, and not a humour of declaiming in any man's praiſes. Obſerve then the ſpeech he uſed of *Diogenes*, and ſee if it tend not to the true ſtate of one of the greateſt queſtions of moral Philoſophy; whether the enjoying of outward things, or the contemning of them, be the greateſt happineſs: for when he ſaw *Diogenes* ſo perfectly contented with ſo little, he ſaid to thoſe that mocked at his condition, *Were I not Alexander, I would wiſh to be Diogenes.* But *Seneca* inverteth it, and ſaith; *Plus erat, quod hic nollet accipere, quàm quod ille poſſet dare. (There were more things which Diogenes would have refuſed, than there were which Alexander could have given.)*

Obſerve again that ſpeech which was uſual with him, *That he felt his mortality chiefly in two things, Sleep and Luſt;* and ſee if it were not a ſpeech extracted out of the depth of natural Philoſophy, and liker to have come out of the mouth of *Ariſtotle* or *Democritus*, than from *Alexander*.

See again that ſpeech of Humanity and poeſy; when upon the bleeding of his wounds, he called unto him one of his flatterers, that was wont to aſcribe to him divine honour, and ſaid, *Look, this is very blood; this is not ſuch a liquor as Homer ſpeaketh of, which ran from Venus' hand, when it was pierced by Diomedes.*

See likewiſe his readineſs in reprehenſion of Logic, in the ſpeech he uſed to *Caſſander*, upon a complaint that was made againſt his father *Antipater:* for when *Alexander* happened to ſay, *Do you think theſe men would have come from ſo far to complain, except they had juſt cauſe of grief?* And *Caſſander* anſwered, *Yea, that was the matter, becauſe they thought they ſhould not be diſproved.* Said *Alexander* laughing: *See the ſubtilties of Ariſtotle, to take a matter both ways, Pro et Contra,* &c.

But note again how well he could uſe the ſame Art, which he reprehended, to ſerve his own humour: when bearing a ſecret grudge to *Calliſthenes*, becauſe he was againſt the new ceremony of his adoration, feaſting one night where the ſame *Calliſthenes* was at the table, it was moved by ſome after ſupper, for entertainment ſake, that *Calliſthenes*, who was an eloquent man, might ſpeak of ſome theme or purpoſe, at his own choice: which *Calliſthenes* did: chooſing the praiſe of the *Macedonian* Nation for his diſcourſe, and performing the ſame with ſo good manner, as the hearers were much raviſhed: whereupon *Alexander*, nothing

pleaſed, ſaid, *It was eaſy to be eloquent upon ſo good a ſubject.* But, ſaith he, *Turn your ſtyle, and let us hear what you can ſay againſt us:* which *Calliſthenes* preſently undertook, and did with that ſting and life, that *Alexander* interrupted him, and ſaid, *The goodneſs of the cauſe made him eloquent before, and deſpite made him eloquent then again.*

Conſider further, for tropes of Rhetoric, that excellent uſe of a Metaphor or tranſlation, wherewith he taxed *Antipater*, who was an imperious and tyrannous Governor: for when one of *Antipater's* friends commended him to *Alexander* for his moderation, that he did not degenerate, as his other Lieutenants did, into the *Perſian* pride, in uſe of purple, but kept the ancient habit of *Macedon*, of black; *True*, ſaith *Alexander*, *but* Antipater *is all purple within.* Or that other, when *Parmenio* came to him in the plain of *Arbela*, and ſhowed him the innumerable multitude of his enemies, eſpecially as they appeared by the infinite number of lights, as it had been a new firmament of ſtars, and thereupon adviſed him to aſſail them by night: whereupon he anſwered, *That he would not ſteal the Victory.*

For matter of policy, weigh that ſignificant diſtinction, ſo much in all ages embraced, that he made between his two friends, *Hephæſtion* and *Craterus*, when he ſaid, *That the one loved Alexander, and the other loved the King:* deſcribing the principal difference of Princes' beſt ſervants, that

ſome in affection love their perſon, and others in duty love their crown.

Weigh alſo that excellent taxation of an Error, ordinary with Counſellors of Princes, that they counſel their Maſters according to the model of their own mind and fortune, and not of their Maſters'; when, upon *Darius's* great offers, *Parmenio* had ſaid, *Surely I would accept theſe offers, were I as Alexander;* ſaith *Alexander*, *So would I, were I as Parmenio.*

Laſtly, weigh that quick and acute reply, which he made when he gave ſo large gifts to his friends and ſervants, and was aſked what he did reſerve for himſelf, and he anſwered, *Hope:* weigh, I ſay, whether he had not caſt up his account right, becauſe *Hope* muſt be the portion of all that reſolve upon great enterpriſes. For this was *Cæſar's* portion when he went firſt into *Gaul*, his eſtate being then utterly overthrown with Largeſſes. And this was likewiſe the portion of that noble Prince, howſoever tranſported with ambition, *Henry* Duke of *Guiſe*, of whom it was uſually ſaid, that he was the greateſt Uſurer in *France*, becauſe he had turned all his eſtate into obligations.

To conclude, therefore: as certain *Critics* are uſed to ſay hyperbolically, *That if all ſciences were loſt they might be found in Virgil!* ſo certainly this may be ſaid truly, there are the prints and footſteps of Learning in thoſe few ſpeeches which are reported of this Prince: the admiration of whom,

when I conſider him not as *Alexander* the Great, but as *Ariſtotle's* Scholar, hath carried me too far.

As for *Julius Cæſar*, the excellency of his learning needeth not to be argued from his education, or his company, or his ſpeeches; but in a further degree doth declare itſelf in his writings and works; whereof ſome are extant and permanent, and ſome unfortunately periſhed. For, firſt, we ſee, there is left unto us that excellent Hiſtory of his own wars, which he intitled only a Commentary, wherein all ſucceeding times have admired the ſolid weight of matter, and the real paſſages and lively Images of actions and perſons, expreſſed in the greateſt propriety of words and perſpicuity of Narration that ever was; which that it was not the effect of a natural gift, but of Learning and precept, is well witneſſed by that work of his, intitled, *De Analogia*, being a grammatical Philoſophy, wherein he did labour to make this ſame *Vox ad placitum* to become *Vox ad licitum*, and to reduce cuſtom of ſpeech to congruity of ſpeech; and took, as it were, the picture of words from the life of reaſon.

So we receive from him, as a Monument both of his power and Learning, the then reformed computation of the year; well expreſſing that he took it to be as great a glory to himſelf to obſerve and know the law of the Heavens, as to give law to men upon the earth.

So likewiſe in that book of his, *Anti-Cato*, it

may eaſily appear that he did aſpire as well to victory of wit as victory of war: undertaking therein a conflict againſt the greateſt Champion with the pen that then lived, *Cicero* the Orator.

So again in this Book of *Apophthegms*, which he collected, we ſee that he eſteemed it more honour to make himſelf but a pair of Tables, to take the wiſe and pithy words of others, than to have every word of his own to be made an *Apophthegm* or an Oracle; as vain Princes, by cuſtom of flattery, pretend to do. And yet if I ſhould enumerate divers of his ſpeeches, as I did thoſe of *Alexander*, they are truly ſuch as *Solomon* noteth, when he ſaith, *Verba ſapientum tanquam aculei, et tanquam clavi in altum defixi:* whereof, I will only recite three, not ſo delectable for elegancy, but admirable for vigour and efficacy.

As, firſt, it is reaſon he be thought a Maſter of words, that could with one word appeaſe a mutiny in his Army, which was thus: The *Romans*, when their Generals did ſpeak to their Army, did uſe the word *Milites*, but when the Magiſtrates ſpake to the people, they did uſe the word *Quirites*. The Soldiers were in tumult, and ſeditiouſly prayed to be caſhiered; not that they ſo meant, but by expoſtulation thereof to draw *Cæſar* to other Conditions; wherein he being reſolute not to give way, after ſome ſilence, he began his ſpeech, *Ego Quirites:* which did admit them already caſhiered; wherewith they were ſo ſurpriſed, croſſed, and confuſed, as they would not ſuffer him to go on in his

ſpeech, but relinquiſhed their demands, and made it their ſuit to be again called by the name of *Milites*.

The ſecond ſpeech was thus: *Cæſar* did extremely affect the name of King; and ſome were ſet on, as he paſſed by, in popular acclamation to ſalute him King: whereupon, finding the cry weak and poor, he put it off thus, in a kind of Jeſt, as if they had miſtaken his ſurname; *Non Rex ſum, ſed Cæſar;* a ſpeech, that if it be ſearched, the life and fulneſs of it can ſcarce be expreſſed: for, firſt, it was a refuſal of the name, but yet not ſerious: again, it did ſignify an infinite confidence and magnanimity, as if he preſumed *Cæſar* was the greater Title; as by his worthineſs it is come to paſs till this day: but chiefly it was a ſpeech of great allurement toward his own purpoſe; as if the State did ſtrive with him but for a name, whereof mean families were veſted; for *Rex* was a ſurname with the *Romans*, as well as *King* is with us.

The laſt ſpeech which I will mention, was uſed to *Metellus;* when *Cæſar*, after War declared, did poſſeſs himſelf of the City of *Rome;* at which time entering into the inner Treaſury to take the money there accumulated, *Metellus*, being Tribune, forbade him: whereto *Cæſar* ſaid, *That if he did not deſiſt, he would lay him dead in the place.* And preſently taking himſelf up, he added, *Adoleſcens, durius eſt mihi hoc dicere quàm facere. Young man, it is harder for me to ſpeak than to do it.* A ſpeech compounded of the greateſt terror and greateſt

clemency that could proceed out of the mouth of man.

But to return and conclude with him; it is evident, himſelf knew well his own perfection in learning, and took it upon him; as appeared when, upon occaſion that ſome ſpake what a ſtrange reſolution it was in *Lucius Sylla* to reſign his Dictature; he ſcoffing at him, to his own advantage, anſwered, *That Sylla could not ſkill of Letters, and therefore knew not how to Dictate.*

And here it were fit to leave this point, touching the concurrence of military Virtue and Learning, for what example would come with any grace after thoſe two of *Alexander* and *Cæſar?* were it not in regard of the rareneſs of Circumſtance, that I find in one other particular, as that which did ſo ſuddenly paſs from extreme ſcorn to extreme wonder; and it is of *Xenophon* the Philoſopher, who went from *Socrates'* School into *Aſia*, in the expedition of *Cyrus* the younger, againſt King *Artaxerxes*. This *Xenophon* at that time was very young, and never had ſeen the Wars before; neither had any command in the Army, but only followed the War as a Voluntary, for the love and converſation of *Proxenus* his Friend. He was preſent when *Falinus* came in Meſſage from the great King to the *Grecians*, after that *Cyrus* was ſlain in the field, and they a handful of men left to themſelves in the midſt of the King's Territories, cut off from their Country by many navigable Rivers, and many hundred miles. The Meſſage

imported, that they ſhould deliver up their Arms, and ſubmit themſelves to the King's mercy. To which Meſſage before anſwer was made divers of the Army conferred familiarly with *Falinus:* and amongſt the reſt *Xenophon* happened to ſay, *Why, Falinus, we have now but theſe two things left, our Arms and our Virtue! and if we yield up our Arms, how ſhall we make uſe of our Virtue?* Whereto *Falinus* ſmiling on him, ſaid, *If I be not deceived, young Gentleman, you are an Athenian; and, I believe you ſtudy Philoſophy, and it is pretty that you ſay: but you are much abuſed, if you think your Virtue can withſtand the King's power.* Here was the ſcorn; the wonder followed: which was, that this young Scholar, or Philoſopher, after all the Captains were murdered in parley by Treaſon, conducted thoſe ten Thouſand foot, through the heart of all the King's high Countries, from *Babylon* to *Græcia* in ſafety, in deſpite of all the King's forces, to the aſtoniſhment of the world, and the encouragement of the *Grecians* in time ſucceeding to make invaſion upon the Kings of *Perſia:* as was after purpoſed by *Jaſon* the *Theſſalian*, attempted by *Ageſilaus* the *Spartan*, and achieved by *Alexander* the *Macedonian*, all upon the ground of the act of that young Scholar.

To proceed now from Imperial and Military virtue to Moral and private virtue: firſt, it is an aſſured truth, which is contained in the Verſes:

Scilicet ingenuas didiciſſe fideliter artes,
Emollit mores, nec ſinit eſſe feros.

It taketh away the wildneſs and Barbariſm and fierceneſs of men's minds; but indeed the accent had need be upon *fideliter:* for a little ſuperficial learning doth rather work a contrary effect. It taketh away all levity, temerity, and inſolency, by copious ſuggeſtion of all doubts and difficulties, and acquainting the mind to balance reaſons on both ſides, and to turn back the firſt offers and conceits of the mind, and to accept of nothing but examined and tried. It taketh away vain admiration of any thing, which is the Root of all weakneſs: for all things are admired either becauſe they are new, or becauſe they are great. For novelty, no man that wadeth in learning or contemplation throughly, but will find that Printed in his heart *Nil novi ſuper terram.* Neither can any man marvel at the play of Puppets, that goeth behind the Curtain, and adviſeth well of the Motion. And for Magnitude, as *Alexander* the Great, after that he was uſed to great Armies, and the great Conqueſts of the ſpacious Provinces in *Aſia*, when he received Letters out of *Greece*, of ſome fights and ſervices there, which were commonly for a paſſage or a Fort or ſome walled Town at the moſt, he ſaid, *It ſeemed to him, that he was advertiſed of the Battle of the Frogs and the Mice, that the old tales went of.* So certainly, if a man meditate much upon the Univerſal frame of Nature, the earth with men upon it, (the Divineneſs of ſouls except,) will not ſeem much other than an Ant-hill, whereas ſome Ants carry Corn, and ſome carry their young,

and ſome go empty, and all to-and-fro a little heap of Duſt. It taketh away or mitigateth fear of Death, or adverſe Fortune; which is one of the greateſt impediments of Virtue, and imperfections of manners. For if a man's mind be deeply ſeaſoned with the conſideration of the mortality and corruptible nature of things, he will eaſily concur with *Epictetus*, who went forth one day and ſaw a Woman weeping for her Pitcher of earth that was broken; and went forth the next day and ſaw a Woman weeping for her Son that was Dead: and thereupon ſaid, *Heri vidi fragilem frangi, hodie vidi mortalem mori.* And therefore *Virgil* did excellently and profoundly couple the Knowledge of cauſes and the Conqueſt of all fears together, as *Concomitantia.*

Felix, qui potuit rerum cognoſcere cauſas,
Quique metus omnes, et inexorabile fatum
Subjecit pedibus, ſtrepitumque Acherontis avari.

It were too long to go over the particular remedies which Learning doth Miniſter to all the diſeaſes of the mind; ſometimes purging the ill-humours, ſometimes opening the obſtructions, ſometimes helping Digeſtion, ſometimes increaſing appetite, ſometimes healing the wounds and exulcerations thereof, and the like; and, therefore, I will conclude with that which hath *Rationem totius*, which is, that it diſpoſeth the Conſtitution of the mind not to be fixed or ſettled in the defects thereof, but ſtill to be capable and ſuſceptible of growth and Reformation. For the unlearned man

knows not what it is to deſcend into himſelf, or to call himſelf to account; nor the pleaſure of that *Suaviſſima vita, indies ſentire ſe fieri meliorem.* The good parts he hath he will learn to ſhew to the full, and uſe them dexterouſly, but not much to increaſe them: the faults he hath he will learn how to hide and colour them, but not much to amend them: like an ill Mower, that mows on ſtill, and never whets his Scythe. Whereas with the learned man it fares otherwiſe, that he doth ever intermix the correction and amendment of his mind with the uſe and employment thereof. Nay further, in general and in ſum, certain it is that *Veritas* and *Bonitas* differ but as the Seal and the Print: for Truth prints Goodneſs; and they be the clouds of Error which deſcend in the ſtorms of paſſions and perturbations.

From Moral virtue let us paſs on to matter of power and commandment, and conſider whether in right Reaſon there be any comparable with that wherewith Knowledge inveſteth and Crowneth man's nature. We ſee the dignity of the Commandment is according to the dignity of the Commanded: to have commandment over Beaſts, as Herdſmen have, is a thing contemptible; to have commandment over Children, as Schoolmaſters have, is a matter of ſmall honour; to have commandment over Galley-ſlaves is a diſparagement rather than an honour. Neither is the commandment of Tyrants much better, over people which have put off the generoſity of their minds: and

therefore it was ever holden that honours in free Monarchies and Commonwealths had a ſweetneſs more than in Tyrannies; becauſe the commandment extendeth more over the wills of men, and not only over their deeds and ſervices. And therefore, when *Virgil* putteth himſelf forth to attribute to *Auguſtus Cæſar* the beſt of human honours, he doth it in theſe words:

Victorque volentes
Per populos dat jura, viamque affectat Olympo.

But the commandment of Knowledge is yet higher than the commandment over the will; for it is a commandment over the reaſon, belief, and underſtanding of man, which is the higheſt part of the mind, and giveth law to the will itſelf: for there is no power on earth which ſetteth up a Throne or Chair of State in the ſpirits and ſouls of men, and in their cogitations, imaginations, opinions, and beliefs, but Knowledge and Learning. And therefore we ſee the deteſtable and extreme pleaſure that Archheretics, and falſe Prophets, and Impoſtors are tranſported with, when they once find in themſelves that they have a ſuperiority in the faith and Conſcience of men; ſo great, that, if they have once taſted of it, it is ſeldom ſeen that any torture or perſecution can make them relinquiſh or abandon it. But as this is that which the Author of the *Revelation* calleth the depth or profoundneſs of *Satan:* ſo by argument of contraries, the juſt and lawful Sovereignty over men's underſtanding, by force of truth rightly interpreted, is that which approacheth neareſt to the ſimilitude of the Divine rule.

As for fortune and advancement, the beneficence of learning is not ſo confined to give fortune only to States and Commonwealths, as it doth not likewiſe give Fortune to particular perſons. For it was well noted long ago, that *Homer* hath given more men their livings, than either *Sylla*, or *Cæſar*, or *Auguſtus* ever did, notwithſtanding their great largeſſes and donatives, and diſtributions of Lands to ſo many legions: and no doubt it is hard to ſay, whether arms or learning have advanced greater numbers. And in caſe of Sovereignty we ſee, that if arms or deſcent have carried away the Kingdom, yet learning hath carried the Prieſthood, which ever hath been in ſome competition with Empire.

Again, for the pleaſure and delight of knowledge and learning, it far ſurpaſſeth all other in nature: for, ſhall the pleaſures of the affections ſo exceed the ſenſes, as much as the obtaining of deſire or Victory exceedeth a ſong or a dinner; and muſt not, of conſequence, the pleaſures of the intellect or underſtanding exceed the pleaſures of the affections? We ſee in all other pleaſures there is ſatiety, and after they be uſed, their verdure departeth; which ſheweth well they be but deceits of pleaſure, and not pleaſures; and that it was the novelty which pleaſed, and not the quality: and therefore we ſee that voluptuous men turn Friars, and ambitious Princes turn melancholy. But of knowledge there is no ſatiety, but ſatisfaction and appetite are perpetually interchangeable; and therefore appeareth to be good in itſelf ſimply, without fal-

lacy or accident. Neither is that pleaſure of ſmall efficacy and contentment to the mind of man, which the Poet *Lucretius* deſcribeth elegantly,

Suave mari magno, turbantibus æquora ventis, &c.

It is a view of delight, ſaith he, *to ſtand or walk upon the ſhore ſide, and to ſee a Ship toſſed with tempeſt upon the ſea; or to be in a fortified Tower, and to ſee two Battles join upon a plain; but it is a pleaſure incomparable, for the mind of man to be ſettled, landed, and fortified in the certainty of truth; and from thence to deſcry and behold the errors, perturbations, labours, and wanderings up and down of other men.*

Laſtly, leaving the vulgar arguments, that by learning man excelleth man in that wherein man excelleth beaſts; that by Learning man aſcendeth to the heavens and their motions, where in body he cannot come, and the like; let us conclude with the dignity and excellency of Knowledge and Learning in that whereunto man's nature doth moſt aſpire, which is, immortality or continuance: for to this tendeth generation, and raiſing of houſes and families; to this buildings, foundations, and monuments; to this tendeth the deſire of memory, fame, and celebration, and in effect the ſtrength of all other human deſires. We ſee then how far the monuments of wit and learning are more durable than the monuments of power or of the hands. For have not the Verſes of *Homer* continued twenty-five hundred years, or more, without

the loſs of a ſyllable or letter; during which time, infinite Palaces, Temples, Caſtles, Cities, have been decayed and demoliſhed? It is not poſſible to have the true pictures or ſtatues of *Cyrus*, *Alexander*, *Cæſar;* no, nor of the Kings or great Perſonages of much later years; for the originals cannot laſt, and the Copies cannot but loſe of the life and truth. But the Images of men's wits and knowledges remain in Books, exempted from the wrong of time, and capable of perpetual renovation. Neither are they fitly to be called Images, becauſe they generate ſtill, and caſt their ſeeds in the minds of others, provoking and cauſing infinite actions and opinions in ſucceeding ages: ſo that, if the invention of the Ship was thought ſo noble, which carrieth riches and commodities from place to place, and conſociateth the moſt remote Regions in participation of their Fruits, how much more are letters to be magnified, which, as Ships, paſs through the vaſt Seas of time, and make ages ſo diſtant to participate of the wiſdom, illuminations, and inventions, the one of the other? Nay further, we ſee, ſome of the Philoſophers which were leaſt divine, and moſt immerſed in the ſenſes, and denied generally the immortality of the ſoul, yet came to this point, that whatſoever motions the ſpirit of man could act and perform without the Organs of the body, they thought, might remain after death, which were only thoſe of the underſtanding, and not of the affections: ſo immortal and incorruptible a thing did knowledge ſeem unto

them to be. But we, that know by divine Revelation, that not only the underſtanding but the affections purified, not only the ſpirit but the body changed, ſhall be advanced to immortality, do diſclaim theſe rudiments of the ſenſes. But it muſt be remembered both in this laſt point, and ſo it may likewiſe be needful in other places, that in probation of the dignity of Knowledge or Learning, I did in the beginning ſeparate Divine teſtimony from human, which Method I have purſued, and ſo handled them both apart.

Nevertheleſs, I do not pretend, and I know it will be impoſſible for me, by any Pleading of mine, to reverſe the Judgment, either of *Æſop's* Cock, that preferred the Barleycorn before the Gem; or of *Midas*, that being choſen Judge between *Apollo* Preſident of the *Muſes*, and *Pan* God of the Flocks, judged for Plenty: or of *Paris*, that judged for Beauty and love againſt Wiſdom and Power; nor of *Agrippina*, *Occidat matrem, modo imperet*, that preferred Empire with conditions never ſo deteſtable; or of *Ulyſſes*, *Qui vetulam prætulit immortalitati*, being a figure of thoſe which prefer Cuſtom and Habit before all excellency; or of a number of the like popular judgments. For theſe things continue as they have been: but ſo will that alſo continue whereupon Learning hath ever relied, and which faileth not: *Juſtificata eſt ſapientia a filiis ſuis.*

THE SECOND BOOK OF FRANCIS BACON.

Of the Proficience and Advancement of Learning, Divine and Human.

To the King.

IT might ſeem to have more convenience, though it come often otherwiſe to paſs, Excellent King, that thoſe, which are fruitful in their generations, and have in themſelves the foreſight of Immortality in their deſcendants, ſhould likewiſe be more careful of the good eſtate of future times, unto which they know they muſt tranſmit and commend over their deareſt pledges. Queen *Elizabeth* was a ſojourner in the World in reſpect of her unmarried life, and was a bleſſing to her own times: and yet ſo as the impreſſion of her good Government, beſides her happy memory, is not without ſome effect which doth ſurvive her. But to your Majeſty, whom God hath already bleſſed with ſo much Royal iſſue, worthy to continue and repreſent you

for ever; and whoſe youthful and fruitful bed doth yet promiſe many of the like renovations; it is proper and agreeable to be converſant, not only in the tranſitory parts of good government, but in thoſe acts alſo which are in their nature permanent and perpetual: amongſt the which, if affection do not tranſport me, there is not any more worthy than the further endowment of the world with ſound and fruitful knowledge. For why ſhould a few received Authors ſtand up like *Hercules's Columns*, beyond which there ſhould be no ſailing or diſcovering, ſince we have ſo bright and benign a ſtar as your Majeſty to conduct and proſper us? To return therefore where we left, it remaineth to conſider of what kind thoſe Acts are, which have been undertaken and performed by Kings and others for the increaſe and advancement of learning: wherein I purpoſe to ſpeak actively without digreſſing or dilating.

Let this ground therefore be laid, that all works are overcome by amplitude of reward, by ſoundneſs of direction, and by the conjunction of labours. The firſt multiplieth endeavour, the ſecond preventeth error, and the third ſupplieth the frailty of man: but the principal of theſe is direction: for *Claudus in via antevertit curſorem extra viam*; and *Solomon* excellently ſetteth it down, *If the Iron be not ſharp, it requireth more ſtrength; but Wiſdom is that which prevaileth;* ſignifying that the Invention or election of the Mean is more effectual than any inforcement or accumulation of endeavours.

This I am induced to ſpeak, for that (not derogating from the noble intention of any that have been deſervers towards the State of Learning) I do obſerve, nevertheleſs, that their works and Acts are rather matters of Magnificence and Memory, than of progreſſion and proficience; and tend rather to augment the maſs of Learning in the multitude of Learned men, than to rectify or raiſe the Sciences themſelves.

The Works or Acts of merit towards Learning are converſant about three objects: the Places of Learning, the Books of Learning, and the Perſons of the Learned. For as water, whether it be the dew of Heaven, or the ſprings of the Earth, doth ſcatter and loſe itſelf in the ground, except it be collected into ſome Receptacle, where it may by union comfort and ſuſtain itſelf, (and for that cauſe the Induſtry of Man hath made and framed Spring-heads, Conduits, Ciſterns, and Pools, which men have accuſtomed likewiſe to beautify and adorn with accompliſhments of Magnificence and State, as well as of uſe and neceſſity) ſo this excellent liquor of Knowledge, whether it deſcend from divine inſpiration, or ſpring from human ſenſe, would ſoon periſh and vaniſh to oblivion, if it were not preſerved in Books, Traditions, Conferences, and Places appointed, as Univerſities, Colleges, and Schools, for the receipt and comforting of the ſame.

The works which concern the Seats and Places of Learning are four; Foundations and Buildings, Endowments with Revenues, Endowments with

Franchiſes and Privileges, Inſtitutions and Ordinances for government; all tending to quietneſs and privateneſs of life, and diſcharge of cares and troubles; much like the Stations which *Virgil* preſcribeth for the hiving of Bees:

Principio ſedes Apibus ſtatioque petenda,
Quo neque ſit ventis aditus, &c.

The works touching Books are two; firſt Libraries, which are as the Shrines where all the Relics of the ancient Saints, full of true virtue, and that without deluſion or impoſture, are preſerved and repoſed: ſecondly, new Editions of Authors, with more correct Impreſſions, more faithful tranſlations, more profitable gloſſes, more diligent Annotations, and the like.

The works pertaining to the perſons of Learned men, beſides the advancement and countenancing of them in general, are two: the reward and deſignation of Readers in Sciences already extant and invented; and the reward and deſignation of Writers and Inquirers concerning any parts of Learning not ſufficiently laboured and proſecuted.

Theſe are ſummarily the Works and Acts, wherein the merits of many excellent Princes and other worthy Perſonages have been converſant. As for any particular commemorations, I call to mind what *Cicero* ſaid, when he gave general thanks; *Difficile non aliquem, ingratum, quenquam præterire.* Let us rather, according to the Scriptures, look unto that part of the Race which is before us, than look back to that which is already attained.

Firſt, therefore, amongſt ſo many great Foundations of Colleges in *Europe*, I find it ſtrange that they are all dedicated to Profeſſions, and none left free to Arts and Sciences at large. For if men judge that learning ſhould be referred to action, they judge well; but in this they fall into the Error deſcribed in the ancient Fable, in which the other parts of the body did ſuppoſe the ſtomach had been idle, becauſe it neither performed the office of Motion, as the limbs do, nor of Senſe, as the head doth; but yet, notwithſtanding, it is the Stomach that digeſteth and diſtributeth to all the reſt: ſo if any man think Philoſophy and Univerſality to be idle Studies, he doth not conſider that all Profeſſions are from thence ſerved and ſupplied. And this I take to be a great cauſe that hath hindered the progreſſion of learning, becauſe theſe Fundamental knowledges have been ſtudied but in paſſage. For if you will have a Tree bear more fruit than it hath uſed to do, it is not any thing you can do to the boughs, but it is the ſtirring of the earth and putting new mould about the Roots, that muſt work it. Neither is it to be forgotten, that this dedicating of Foundations and Donations to profeſſory Learning hath not only had a malign aſpect and influence upon the growth of Sciences, but hath alſo been prejudicial to States and Governments. For hence it proceedeth that Princes find a ſolitude in regard of able men to ſerve them in cauſes of ſtate, becauſe there is no education collegiate which is free; where ſuch as were ſo diſpoſed might give

themſelves to Hiſtories, modern Languages, Books of policy and civil Diſcourſe, and other the like enablements unto ſervice of eſtate.

And becauſe Founders of Colleges do plant, and Founders of Lectures do water, it followeth well in order to ſpeak of the defect which is in public Lectures; namely, in the ſmallneſs and meanneſs of the ſalary or reward which in moſt places is aſſigned unto them; whether they be Lectures of Arts, or of Profeſſions. For it is neceſſary to the progreſſion of Sciences that Readers be of the moſt able and ſufficient men; as thoſe which are ordained for generating and propagating of Sciences, and not for tranſitory uſe. This cannot be, except their condition and endowment be ſuch as may content the ableſt man to appropriate his whole labour, and continue his whole age in that function and attendance; and therefore muſt have a proportion anſwerable to that mediocrity or competency of advancement, which may be expected from a Profeſſion or the Practice of a Profeſſion. So as, if you will have Sciences flouriſh, you muſt obſerve *David's* military Law, which was, *That thoſe which ſtaid with the Carriage ſhould have equal part with thoſe which were in the Action;* elſe will the carriages be ill attended. So Readers in Sciences are indeed the Guardians of the ſtores and proviſions of Sciences, whence men in active courſes are furniſhed, and therefore ought to have equal entertainment with them: otherwiſe if the fathers in Sciences be of the weakeſt ſort, or be ill-maintained.

Et Patrum invalidi referent jejunia nati.

Another defect I note, wherein I ſhall need ſome Alchemiſt to help me, who call upon men to ſell their Books, and to build Furnaces; quitting and forſaking *Minerva* and the *Muſes* as barren Virgins, and relying upon *Vulcan*. But certain it is, that unto the deep, fruitful, and operative ſtudy of many ſciences, eſpecially Natural Philoſophy and Phyſic, Books be not the only Inſtrumentals; wherein alſo the beneficence of men hath not been altogether wanting: for we ſee Spheres, Globes, Aſtrolabes, Maps, and the like, have been provided as appurtenances to Aſtronomy and Coſmography, as well as Books: we ſee likewiſe that ſome places inſtituted for Phyſic have annexed the commodity of Gardens for Simples of all ſorts, and do likewiſe command the uſe of dead Bodies for Anatomies. But theſe do reſpect but a few things. In general, there will hardly be any Main proficience in the diſcloſing of nature, except there be ſome allowance for expenſes about experiments; whether they be experiments appertaining to *Vulcanus* or *Dædalus*, Furnace or Engine, or any other kind; and therefore as Secretaries and Spials of Princes and States bring in Bills for Intelligence, ſo, you muſt allow the Spials and Intelligencers of Nature to bring in their Bills; or elſe you ſhall be ill advertiſed.

And if *Alexander* made ſuch a liberal aſſignation to *Ariſtotle* of treaſure for the allowance of Hunters, Fowlers, Fiſhers, and the like, that he might

compile a Hiſtory of Nature, much better do they deſerve it that travail in Arts of Nature.

Another defect which I note, is an intermiſſion or neglect in thoſe which are Governors, in Univerſities, of Conſultation; and in Princes or Superior perſons, of Viſitation: to enter into account and conſideration, whether the Readings, exerciſes, and other cuſtoms appertaining unto Learning, anciently begun, and ſince continued, be well inſtituted or not; and thereupon to ground an amendment or reformation in that which ſhall be found inconvenient. For it is one of your Majeſty's own moſt wiſe and Princely Maxims, *That in all uſages and precedents, the times be conſidered wherein they firſt began; which, if they were weak or ignorant, it derogateth from the Authority of the Uſage, and leaveth it for ſuſpect.* And therefore in as much as moſt of the uſages and orders of the Univerſities were derived from more obſcure times, it is the more requiſite they be re-examined. In this kind I will give an inſtance or two, for example' ſake, of things that are the moſt obvious and familiar: the one is a matter, which though it be ancient and general, yet I hold to be an error; which is, that Scholars in Univerſities come too ſoon and too unripe to Logic and Rhetoric, arts fitter for Graduates than Children and Novices: for theſe two, rightly taken, are the graveſt of Sciences, being the Arts of Arts; the one for Judgment, the other for Ornament: and they be the Rules and Directions how to ſet forth and diſpoſe

matter; and therefore for minds empty and unfraught with matter, and which have not gathered that which *Cicero* calleth *Sylva* and *Supellex*, ſtuff and variety, to begin with thoſe Arts, (as if one ſhould learn to weigh, or to meaſure, or to paint the Wind), doth work but this effect, that the wiſdom of thoſe Arts, which is great and univerſal, is almoſt made contemptible, and is degenerate into childiſh ſophiſtry and ridiculous affectation. And further, the untimely learning of them hath drawn on, by conſequence, the ſuperficial and unprofitable teaching and writing of them, as fitteſt indeed to the capacity of children. Another is a lack I find in the exerciſes uſed in the Univerſities, which do make too great a divorce between Invention and Memory; for their ſpeeches are either premeditate, *In Verbis conceptis*, where nothing is left to Invention, or merely *Extemporal*, where little is left to Memory: whereas in life and action there is leaſt uſe of either of theſe, but rather of intermixtures of premeditation and Invention, Notes and Memory; ſo as the exerciſe fitteth not the practice, nor the Image the life; and it is ever a true Rule in exerciſes, that they be framed as near as may be to the life of practice; for otherwiſe they do pervert the motions and faculties of the mind, and not prepare them. The truth whereof is not obſcure, when Scholars come to the practices of profeſſions, or other actions of civil life; which when they ſet into, this want is ſoon found by themſelves, and ſooner by others.

But this part, touching the amendment of the Inſtitutions and orders of Univerſities, I will conclude with the clauſe of *Cæſar's* letter to *Oppius* and *Balbus*, *Hoc quemadmodum fieri poſſit, nonnulla mihi in mentem veniunt, et multa reperiri poſſunt; de iis rebus rogo vos ut cogitationem ſuſcipiatis.*

Another defect, which I note, aſcendeth a little higher than the preceding: for as the proficience of learning conſiſteth much in the orders and inſtitutions of Univerſities in the ſame ſtates and kingdoms, ſo it would be yet more advanced, if there were more Intelligence mutual between the Univerſities of *Europe* than now there is. We ſee there be many Orders and Foundations, which though they be divided under ſeveral ſovereignties and territories, yet they take themſelves to have a kind of contract, fraternity, and correſpondence one with the other; inſomuch as they have Provincials and Generals. And ſurely, as Nature createth Brotherhood in Families, and Arts Mechanical contract Brotherhoods in Commonalties, and the Anointment of God ſuperinduceth a Brotherhood in Kings and Biſhops; ſo in like manner there cannot but be a fraternity in learning and illumination, relating to that Paternity which is attributed to God, who is called the Father of illuminations or lights.

The laſt defect which I will note is, that there hath not been, or very rarely been, any public Deſignation of Writers or Inquirers concerning ſuch parts of knowledge as may appear not to have been

already ſufficiently laboured or undertaken; unto which point it is an Inducement to enter into a view and examination what parts of learning have been proſecuted, and what omitted: for the opinion of plenty is amongſt the cauſes of want, and the great quantity of Books maketh a ſhow rather of ſuperfluity than lack; which ſurcharge, nevertheleſs, is not to be remedied by making no more books, but by making more good books, which, as the ſerpent of *Moſes*, might devour the ſerpents of the enchanters.

The removing of all the defects formerly enumerated, except the laſt, and of the active part alſo of the laſt, (which is the deſignation of Writers,) are *Opera Baſilica;* towards which the endeavours of a private man may be but as an Image in a croſſway, that may point at the way, but cannot go it: but the inducing part of the latter, which is the ſurvey of Learning, may be ſet forward by private travel. Wherefore I will now attempt to make a general and faithful perambulation of learning, with an inquiry what parts thereof lie freſh and waſte, and not improved and converted by the induſtry of man; to the end that ſuch a plot, made and recorded to memory, may both miniſter light to any public deſignation, and alſo ſerve to excite voluntary endeavours: wherein, nevertheleſs, my purpoſe is, at this time, to note only omiſſions and deficiencies, and not to make any redargution of errors, or incomplete proſecutions; for it is one thing to ſet forth what ground lieth unmanured,

and another thing to correct ill husbandry in that which is manured.

In the handling and undertaking of which work I am not ignorant what it is that I do now move and attempt, nor insensible of mine own weakness to sustain my purpose; but my hope is, that if my extreme love to Learning carry me too far, I may obtain the excuse of affection; for that *It is not granted to man to love and to be wise.* But, I know well, I can use no other liberty of Judgment than I must leave to others; and I, for my part, shall be indifferently glad either to perform myself, or accept from another, that duty of humanity; *Nam qui erranti comiter monstrat viam, &c.* I do foresee, likewise, that of those things which I shall enter and Register as Deficiencies and Omissions, many will conceive and censure that some of them are already done and extant; others to be but curiosities, and things of no great use: and others to be of too great difficulty, and almost impossibility to be compassed and effected: but for the two first, I refer myself to the particulars; for the last, touching impossibility, I take it those things are to be held possible which may be done by some person, though not by every one; and which may be done by many, though not by any *one:* and which may be done in the succession of ages, though not within the hourglass of one man's life; and which may be done by public designation, though not by private endeavour. But, notwithstanding, if any Man will take to himself rather that of *Solomon*,

Dicit piger, Leo eſt in via, than that of *Virgil, Poſſunt quia poſſe videntur*, I ſhall be content that my labours be eſteemed but as the better ſort of wiſhes; for as it aſketh ſome Knowledge to demand a queſtion not impertinent, ſo it requireth ſome ſenſe to make a wiſh not abſurd.

THE *Parts* of human Learning have reference to the three parts of Man's Underſtanding, which is the ſeat of Learning: *Hiſtory* to his *Memory*, *Poeſy* to his *Imagination*, and *Philoſophy* to his *Reaſon*. Divine Learning receiveth the ſame diſtribution; for the Spirit of Man is the ſame, though the Revelation of Oracle and Senſe be diverſe: ſo as Theology conſiſteth alſo of the *Hiſtory* of the Church; of *Parables*, which is Divine *Poeſy;* and of holy *Doctrine* or *Precept:* for as for that part which ſeemeth ſupernumerary, which is *Prophecy*, it is but Divine Hiſtory; which hath that prerogative over human, as the Narration may be before the fact as well as after.

Hiſtory is *Natural*, *Civil*, *Eccleſiaſtical*, and *Literary;* whereof the firſt three I allow as extant, the fourth I note as deficient. For no man hath propounded to himſelf the general ſtate of Learning to be deſcribed and repreſented from age to age, as many have done the works of Nature, and the State Civil and Eccleſiaſtical; without which the Hiſtory of the World ſeemeth to me to be as the *Statue* of *Polyphemus* with his eye out; that

part being wanting which doth moſt ſhew the ſpirit and life of the perſon: and yet I am not ignorant that in divers particular ſciences, as of the Juriſconſults, the Mathematicians, the Rhetoricians, the Philoſophers, there are ſet down ſome ſmall memorials of the Schools, Authors, and Books; and ſo likewiſe ſome barren relations touching the Invention of Arts or uſages. But a juſt ſtory of Learning, containing the Antiquities and Originals of Knowledges and their Sects, their Inventions, their Traditions, their diverſe Adminiſtrations and Managings, their Flouriſhings, their Oppoſitions, Decays, Depreſſions, Oblivions, Removes, with the cauſes and occaſions of them, and all other events concerning Learning, throughout the ages of the World, I may truly affirm to be wanting. The uſe and end of which work I do not ſo much deſign for curioſity, or ſatisfaction of thoſe that are the lovers of Learning, but chiefly for a more ſerious and grave purpoſe; which is this, in few words, that it will make Learned men wiſe in the uſe and adminiſtration of Learning. For it is not St. *Auguſtine's* nor St. *Ambroſe's* works that will make ſo wiſe a Divine, as Eccleſiaſtical Hiſtory, thoroughly read and obſerved; and the ſame reaſon is of Learning.

Hiſtory of *Nature* is of three ſorts; of *Nature* in *Courſe*, of *Nature Erring* or *Varying*, and of *Nature Altered* or wrought; that is, *Hiſtory* of *Creatures*, *Hiſtory* of *Marvels*, and *Hiſtory* of *Arts*. The firſt of theſe, no doubt, is extant, and that in

good perfection; the two latter are handled ſo weakly and unprofitably, as I am moved to note them as deficient. For I find no ſufficient or competent Collection of the Works of Nature which have a Digreſſion and Deflexion from the ordinary courſe of Generations, Productions, and Motions; whether they be ſingularities of place and region, or the ſtrange events of time and chance, or the effects of yet unknown properties, or the inſtances of exception to general kinds. It is true, I find a number of books of fabulous Experiments and Secrets, and frivolous Impoſtures for pleaſure and ſtrangeneſs; but a ſubſtantial and ſevere Collection of the *Heteroclites* or *Irregulars* of *Nature*, well examined and deſcribed, I find not: eſpecially not with due rejection of fables and popular Errors: for as things now are, if an untruth in Nature be once on foot, what by reaſon of the neglect of examination, and countenance of Antiquity, and what by reaſon of the uſe of the opinion in ſimilitudes and ornaments of ſpeech, it is never called down.

The uſe of this work, honoured with a precedent in *Ariſtotle*, is nothing leſs than to give contentment to the appetite of Curious and vain Wits, as the manner of *Mirabilaries* is to do; but for two Reaſons, both of great weight; the one to correct the partiality of Axioms and Opinions, which are commonly framed only upon common and familiar examples; the other becauſe from the Wonders of Nature is the neareſt Intelligence and paſſage towards the Wonders of Art: for it is no more but

by following, and as it were hounding Nature in her wanderings, to be able to lead her afterwards to the ſame place again. Neither am I of opinion, in this *Hiſtory* of *Marvels*, that ſuperſtitious Narrations of Sorceries, Witchcrafts, Dreams, Divinations, and the like, where there is an aſſurance and clear evidence of the fact, be altogether excluded. For it is not yet known in what caſes and how far effects attributed to ſuperſtition do participate of Natural Cauſes: and therefore howſoever the practice of ſuch things is to be condemned, yet from the Speculation and conſideration of them light may be taken, not only for the diſcerning of the offences, but for the further diſcloſing of Nature. Neither ought a man to make ſcruple of entering into theſe things for inquiſition of Truth, as your Majeſty hath ſhewed in your own example; who with the two clear eyes of Religion and natural Philoſophy have looked deeply and wiſely into theſe ſhadows, and yet proved yourſelf to be of the Nature of the Sun, which paſſeth through pollutions, and itſelf remains as pure as before. But this I hold fit, that theſe Narrations, which have mixture with ſuperſtition, be ſorted by themſelves, and not be mingled with the Narrations which are merely and ſincerely natural. But as for the Narrations touching the Prodigies and Miracles of Religions, they are either not true, or not Natural; and therefore impertinent for the Story of Nature.

For *Hiſtory* of *Nature Wrought* or *Mechanical*, I find ſome Collections made of Agriculture, and

likewiſe of Manual Arts; but commonly with a rejection of experiments familiar and vulgar. For is eſteemed a kind of diſhonour unto Learning to deſcend to inquiry or Meditation upon Matters Mechanical, except they be ſuch as may be thought ſecrets, rarities, and ſpecial ſubtilties; which humour of vain and ſupercilious Arrogancy is juſtly derided in *Plato;* where he brings in *Hippias*, a vaunting *Sophiſt*, diſputing with *Socrates*, a true and unfeigned inquiſitor of Truth; where the ſubject being touching beauty, *Socrates*, after his wandering manner of Inductions, put firſt an example of a fair Virgin, and then of a fair Horſe, and then of a fair Pot well glazed, whereat *Hippias* was offended, and ſaid, *More than for courteſy's ſake, he did think much to diſpute with any that did allege ſuch baſe and Sordid inſtances:* whereunto *Socrates* anſwered, *You have reaſon, and it becomes you well, being a man ſo trim in your veſtments, &c.* and ſo goeth on in an Irony. But the truth is, they be not the higheſt inſtances that give the ſecureſt information; as may be well expreſſed in the tale ſo common of the Philoſopher, that while he gazed upwards to the Stars fell into the water; for if he had looked down he might have ſeen the Stars in the water, but looking aloft he could not ſee the water in the Stars. So it cometh often to paſs, that mean and ſmall things diſcover great, better than great can diſcover the ſmall: and therefore *Ariſtotle* noteth well, *That the nature of every thing is beſt ſeen in its ſmalleſt portions.* And

for that cauſe he inquireth the nature of a Commonwealth, firſt in a Family, and the Simple Conjugations of Man and Wife, Parent and Child, Maſter and Servant, which are in every cottage. Even ſo likewiſe the nature of this great City of the world, and the policy thereof, muſt be firſt ſought in mean concordances and ſmall portions. So we ſee how that ſecret of Nature, of the turning of Iron touched with the Loadſtone towards the North, was found out in needles of Iron, not in bars of Iron.

But if my judgment be of any weight, the uſe of *Hiſtory Mechanical* is of all others the moſt radical and fundamental towards Natural Philoſophy: ſuch Natural Philoſophy as ſhall not vaniſh in the fume of ſubtile, ſublime, or delectable ſpeculation, but ſuch as ſhall be operative to the endowment and benefit of Man's life: for it will not only miniſter and ſuggeſt for the preſent many ingenious practices in all trades, by a connexion and transferring of the obſervations of one Art to the uſe of another, when the experiences of ſeveral myſteries ſhall fall under the conſideration of one man's mind; but further, it will give a more true and real illumination concerning Cauſes and Axioms than is hitherto attained. For like as a Man's diſpoſition is never well known till he be croſſed, nor *Proteus* ever changed ſhapes till he was ſtraitened and held faſt; ſo the paſſages and variations of Nature cannot appear ſo fully in the liberty of Nature, as in the trials and vexations of Art.

For *Civil Hiſtory*, it is of three kinds; not unfitly to be compared with the three kinds of Pictures or Images: for of Pictures or Images, we ſee, ſome are Unfiniſhed, ſome are perfect, and ſome are defaced. So of Hiſtories we may find three kinds, *Memorials*, *Perfect Hiſtories*, and *Antiquities;* for *Memorials* are Hiſtory unfiniſhed, or the firſt or rough draughts of Hiſtory; and *Antiquities* are Hiſtory defaced, or ſome remnants of Hiſtory which have caſually eſcaped the ſhipwreck of time.

Memorials, or *Preparatory Hiſtory*, are of two ſorts; whereof the one may be termed *Commentaries*, and the other *Regiſters*. *Commentaries* are they which ſet down a continuance of the naked events and actions, without the motives or deſigns, the Counſels, the Speeches, the pretexts, the occaſions and other paſſages of action: for this is the true nature of a Commentary; though *Cæſar*, in modeſty mixed with greatneſs, did for his pleaſure apply the name of a Commentary to the beſt Hiſtory of the World. *Regiſters* are collections of Public Acts, as Decrees of Council, Judicial proceedings, Declarations and Letters of State, Orations and the like, without a perfect continuance or contexture of the thread of the Narration.

Antiquities, or Remnants of Hiſtory, are, as was ſaid, *Tanquam Tabula Naufragii:* when induſtrious perſons, by an exact and ſcrupulous diligence and obſervation, out of Monuments, Names, Words, Proverbs, Traditions, Private Records and

Evidences, Fragments of Stories, Paſſages of Books that concern not Story, and the like, do ſave and recover ſomewhat from the deluge of time.

In theſe kinds of imperfect Hiſtories I do aſſign no deficience, for they are *Tanquam imperfecte Miſta;* and therefore any deficience in them is but their nature.

As for the Corruptions and Moths of Hiſtory, which are *Epitomes*, the uſe of them deſerveth to be baniſhed, as all men of ſound Judgment have confeſſed; as thoſe that have fretted and corroded the ſound bodies of many excellent Hiſtories, and wrought them into baſe and unprofitable dregs.

Hiſtory, which may be called *Juſt* and *Perfect* Hiſtory, is of three kinds, according to the object which it propoundeth, or pretendeth to repreſent: for it either repreſenteth a *Time*, or a *Perſon*, or an *Action*. The firſt we call *Chronicles*, the ſecond *Lives*, and the third *Narrations* or *Relations*. Of theſe, although the firſt be the moſt complete and abſolute kind of Hiſtory, and hath moſt eſtimation and glory, yet the ſecond excelleth it in profit and uſe, and the third in verity and ſincerity: for *Hiſtory* of *Times* repreſenteth the magnitude of Actions, and the public faces and deportments of perſons, and paſſeth over in ſilence the ſmaller paſſages and Motions of men and Matters. But ſuch being the workmanſhip of God, as he doth hang the greateſt weight upon the ſmalleſt Wires, *Maxima è Minimis ſuſpendens*, it comes therefore to paſs, that ſuch Hiſtories do rather ſet forth the

pomp of buſineſs than the true and inward reſorts thereof. But *Lives*, if they be well Written, propounding to themſelves a perſon to repreſent in whom actions both greater and ſmaller, public and private, have a commixture, muſt of neceſſity contain a more true, native, and lively repreſentation. So again Narrations and Relations of actions, as the War of *Peloponneſus*, the Expedition of *Cyrus Minor*, the Conſpiracy of *Catiline*, cannot but be more purely and exactly true than *Hiſtories* of *Times*, becauſe they may chooſe an Argument comprehenſible within the notice and inſtructions of the Writer: whereas he that undertaketh the Story of a Time, eſpecially of any length, cannot but meet with many blanks and ſpaces which he muſt be forced to fill up out of his own wit and conjecture.

For the *Hiſtory* of *Times*, I mean of Civil Hiſtory, the providence of GOD hath made the diſtribution: for it hath pleaſed GOD to ordain and illuſtrate two exemplar States of the World for Arms, Learning, Moral Virtue, Policy, and Laws; the *State* of *Græcia*, and the *State* of *Rome;* the Hiſtories whereof occupying the *Middle part* of time, have, more ancient to them, Hiſtories which may by one common name be termed the *Antiquities* of the *World:* and after them, Hiſtories which may be likewiſe called by the name of *Modern Hiſtory*.

Now to ſpeak of the deficiencies. As to the *Heathen Antiquities* of the World, it is in vain to

note them for deficient: deficient they are no doubt, consisting most of Fables and fragments; but the deficience cannot be holpen; for Antiquity is like Fame, *Caput inter nubila condit*, her head is muffled from our sight. For the *History* of the *Exemplar States*, it is extant in good perfection. Not but I could wish there were a perfect Course of History for *Græcia* from *Theseus* to *Philopœmen*, (what time the Affairs of *Græcia* were drowned and extinguished in the affairs of *Rome*;) and for *Rome* from *Romulus* to *Justinianus*, who may be truly said to be *Ultimus Romanorum*. In which sequences of Story the Text of *Thucydides* and *Xenophon* in the one, and the Texts of *Livius*, *Polybius*, *Sallustius*, *Cæsar*, *Appianus*, *Tacitus*, *Herodianus* in the other, to be kept entire without any diminution at all, and only to be supplied and continued. But this is Matter of Magnificence, rather to be commended than required: and we speak now of parts of Learning supplemental and not of supererogation.

But for *Modern Histories*, whereof there are some few very worthy, but the greater part beneath Mediocrity, (leaving the care of Foreign stories to Foreign States, because I will not be *Curiosus in aliena Republica*,) I cannot fail to represent to your Majesty the unworthiness of the History of *England* in the Main continuance thereof, and the partiality and obliquity of that of *Scotland* in the latest and largest Author that I have seen: supposing that it would be honour for your

Majeſty, and a work very memorable, if this Iſland of Great *Britain*, as it is now joined in Monarchy for the ages to come, ſo were joined in one Hiſtory for the times paſſed; after the manner of the ſacred Hiſtory, which draweth down the Story of the Ten Tribes and of the Two Tribes, as Twins, together. And if it ſhall ſeem that the greatneſs of this Work may make it leſs exactly performed, there is an excellent period of a much ſmaller compaſs of time, as to the Story of *England;* that is to ſay, from the Uniting of the Roſes to the Uniting of the Kingdoms; a portion of time, wherein, to my underſtanding, there hath been the rareſt varieties that in like number of ſucceſſions of any hereditary Monarchy hath been known: for it beginneth with the mixed Adoption of a Crown by Arms and Title: an entry by Battle, an Eſtabliſhment by Marriage, and therefore times anſwerable, like waters after a tempeſt, full of working and ſwelling, though without extremity of Storm; but well paſſed through by the wiſdom of the *Pilot*, being one of the moſt ſufficient Kings of all the number. Then followeth the Reign of a King, whoſe actions, howſoever conducted, had much intermixture with the affairs of *Europe*, balancing and inclining them variably; in whoſe time alſo began that great alteration in the State Eccleſiaſtical, an action which ſeldom cometh upon the Stage. Then the Reign of a Minor: then an offer of a uſurpation, though it was but as *Febris Ephemera:* Then the Reign of a Queen matched with a Fo-

reigner: then of a Queen that lived ſolitary and unmarried, and yet her government ſo maſculine, that it had greater impreſſion and operation upon the States abroad than it any ways received from thence. And now laſt, this moſt happy and glorious event, that this Iſland of *Britain*, divided from all the World, ſhould be United in itſelf: and that Oracle of Reſt, given to *Æneas*, *Antiquam exquirite Matrem*, ſhould now be performed and fulfilled upon the Nations of *England* and *Scotland*, being now reunited in the Ancient Mother name of *Britain*, as a full period of all inſtability and peregrinations: ſo that as it cometh to paſs in Maſſive bodies, that they have certain trepidations and waverings before they fix and ſettle; ſo it ſeemeth that by the providence of God this Monarchy, before it was to ſettle in your Majeſty and your generations, (in which, I hope, it is now eſtabliſhed for ever,) had theſe preluſive changes and varieties.

For *Lives*, I do find it ſtrange that theſe times have ſo little eſteemed the virtues of the times, as that the Writing of Lives ſhould be no more frequent. For although there be not many Sovereign Princes or abſolute commanders, and that States are moſt collected into Monarchies, yet are there many worthy perſonages that deſerve better than diſperſed Report or barren *Eulogies*. For herein the invention of one of the late Poets is proper, and doth well enrich the ancient fiction: for he feigneth that at the end of the thread or Web of every man's life

there was a little *Medal* containing the *Perſon's* name, and that *Time* waited upon the ſhears; and as ſoon as the thread was cut, caught the Medals, and carried them to the River of *Lethe;* and about the bank there were many Birds flying up and down, that would get the Medals and carry them in their Beak a little while, and then let them fall into the River: only there were a few Swans, which if they got a Name, would carry it to a Temple where it was Conſecrate.

And although many men, more mortal in their affections than in their bodies, do eſteem deſire of name andmemory but as a vanity and ventoſity,

Animi nil magnæ laudis egentes;

which opinion cometh from that Root, *Non prius laudes contempſimus, quam laudanda facere deſivimus:* yet that will not alter *Solomon's* judgment, *Memoria Juſti cum laudibus, at impiorum nomen putreſcet:* the one flouriſheth, the other either conſumeth to preſent oblivion, or turneth to an ill odour. And therefore in that ſtyle or addition, which is and hath been long well received and brought in uſe, *Felicis memoriæ, piæ memoriæ, bonæ memoriæ*, we do acknowledge that which *Cicero* ſaith, borrowing it from *Demoſthenes*, that *Bona Fama propria poſſeſſio defunctorum;* which poſſeſſion I cannot but note that in our times it lieth much waſte, and that therein there is a Deficience.

For *Narrations* and *Relations* of particular ac-

tions, there were alſo to be wiſhed a greater diligence therein; for there is no great action but hath ſome good pen which attends it. And becauſe it is an ability not common to Write a good Hiſtory, as may well appear by the ſmall number of them: yet if particularity of actions memorable were but tolerably reported as they paſs, the compiling of a complete *Hiſtory* of *Times* might be the better expected, when a Writer ſhould ariſe that were fit for it: for the collection of ſuch relations might be as a Nurſery garden, whereby to plant a fair and ſtately garden, when time ſhould ſerve.

There is yet another portion of Hiſtory which *Cornelius Tacitus* maketh, which is not to be forgot, eſpecially with that application which he accoupleth it withal, *Annals* and *Journals:* appropriating to the former Matters of eſtate, and to the latter Acts and Accidents of a meaner nature. For giving but a touch of certain Magnificent buildings, he addeth, *Cum ex dignitate populi Romani repertum ſit, res illuſtres annalibus, talia diurnis urbis Actis mandare.* So as there is a kind of contemplative Heraldry, as well as Civil.

And as nothing doth derogate from the dignity of a ſtate more than confuſion of degrees; ſo it doth not a little embaſe the Authority of a Hiſtory, to intermingle matters of triumph, or matters of Ceremony, or matters of Novelty, with matters of State. But the uſe of a *Journal* hath not only been in the Hiſtory of Time, but likewiſe in the Hiſtory of Perſons, and chiefly of actions; for

Princes in ancient time had, upon point of honour and policy both, Journals kept of what paſſed day by day: for we ſee the Chronicle which was read before *Ahaſuerus*, when he could not take reſt, contained matter of affairs indeed, but ſuch as had paſſed in his own time, and very lately before: but the *Journal* of *Alexander's* Houſe expreſſed every ſmall particularity, even concerning his Perſon and Court; and it is yet a uſe well received in enterpriſes memorable, as expeditions of War, Navigations, and the like, to keep *Diaries* of that which paſſeth continually.

I cannot likewiſe be ignorant of a form of Writing which ſome grave and Wiſe men have uſed, containing a ſcattered Hiſtory of thoſe actions which they have thought worthy of memory, with politic Diſcourſe and Obſervation thereupon: not incorporated into the Hiſtory, but ſeparately, and as the more principal in their intention; which kind of *Ruminated Hiſtory* I think more fit to place amongſt Books of Policy, whereof we ſhall hereafter ſpeak, than amongſt Books of Hiſtory: for it is the true office of Hiſtory to Repreſent the events themſelves together with the Counſels, and to leave the obſervations and concluſions thereupon to the liberty and faculty of every man's judgment: but mixtures are things irregular, whereof no man can define.

So alſo is there another kind of Hiſtory manifoldly mixed, and that is *Hiſtory* of *Coſmography:* being compounded of Natural Hiſtory, in reſpect

of the Regions themſelves; of Hiſtory civil, in reſpect of the Habitations, Regimens, and Manners of the people; and the *Mathematics*, in reſpect of the Climates and Configurations towards the Heavens: which part of Learning of all others, in this latter time, hath obtained moſt Proficience. For it may be truly affirmed to the honour of theſe times, and in a virtuous emulation with Antiquity, that this great Building of the world had never *thorough lights* made in it, till the age of us and our Fathers: for although they had knowledge of the *Antipodes*,

Noſque ubi primus equis Oriens afflavit anhelis,
Illic ſera rubens accendit lumina Veſper:

yet that might be by demonſtration, and not in fact; and if by Travel, it requireth the Voyage but of half the Globe. But to circle the earth, as the Heavenly bodies do, was not done nor enterpriſed till theſe latter times: and therefore theſe times may juſtly bear in their word, not only *Plus ultra*, in precedence of the ancient *Non ultra*, and *Imitabile fulmen*, in precedence of the ancient

Non imitabile fulmen,
Demens qui nimbos et non imitabile fulmen; &c.

but likewiſe *Imitabile Cœlum*;

in reſpect of the many memorable Voyages, after the manner of Heaven, about the Globe of the earth.

And this Proficience in Navigation and Diſcoveries may plant alſo an expectation of the further

proficience and augmentation of all Sciences; because it may seem they are ordained by GOD to be *Coevals*, that is, to meet in one Age. For so the Prophet *Daniel*, speaking of the latter times, foretelleth, *Plurimi pertransibunt, et Multiplex erit Scientia:* as if the openness and thorough passage of the World and the increase of Knowledge were appointed to be in the same ages; as we see it is already performed in great part: the Learning of these latter times not much giving place to the former two Periods or Returns of Learning, the one of the *Grecians*, the other of the *Romans*.

History Ecclesiastical receiveth the same divisions with History Civil: but further, in the propriety thereof, may be divided into the *History* of the *Church*, by a general name; *History* of *Prophecy;* and *History* of *Providence*. The first describeth the times of the militant Church, whether it be fluctuant, as the Ark of *Noah;* or moveable, as the Ark in the Wilderness; or at rest, as the Ark in the Temple: that is, the state of the Church in Persecution, in Remove, and in Peace. This part I ought in no sort to note as deficient; only I would that the virtue and sincerity of it were according to the mass and quantity. But I am not now in hand with censures, but with omissions.

The second, which is *History* of *Prophecy*, consisteth of two Relatives, the Prophecy, and the accomplishment; and therefore the nature of such a work ought to be, that every Prophecy of the Scripture be sorted with the event fulfilling the

ſame, throughout the ages of the world; both for the better confirmation of faith, and for the better illumination of the Church touching thoſe parts of Prophecies which are yet unfulfilled: allowing nevertheleſs that Latitude which is agreeable and familiar unto Divine Prophecies; being of the nature of their Author, with whom a thouſand Years are but as one day; and therefore are not fulfilled punctually at once, but have ſpringing and germinant accompliſhment throughout many Ages; though the height or fulneſs of them may refer to ſome one Age. This is a work which I find deficient; but is to be done with wiſdom, ſobriety, and reverence, or not at all.

The third, which is *Hiſtory* of *Providence*, containeth that excellent correſpondence which is between God's revealed will and his ſecret will: which though it be ſo obſcure, as for the moſt part it is not legible to the Natural man; no, nor many times to thoſe that behold it from the Tabernacle; yet at ſome times it pleaſeth God, for our better eſtabliſhment and the confuting of thoſe which are as without God in the World, to write it in ſuch Text and Capital Letters, that as the Prophet ſaith, *He that runneth by may read it;* that is, mere ſenſual perſons, which haſten by God's judgments, and never bend or fix their cogitations upon them, are nevertheleſs in their paſſage and Race urged to diſcern it. Such are the notable events and examples of God's judgments, chaſtiſements, deliverances, and bleſſings: and this is a work

which hath paſſed through the labours of many, and therefore I cannot preſent as omitted.

There are alſo other parts of Learning which are *Appendices* to *Hiſtory:* for all the exterior proceedings of man conſiſt of Words and Deeds; whereof Hiſtory doth properly receive and retain in Memory the Deeds: and if Words, yet but as Inducements and paſſages to Deeds: ſo are there other Books and Writings, which are appropriate to the cuſtody and receipt of Words only: which likewiſe are of three ſorts: *Orations*, *Letters*, and *Brief Speeches* or *Sayings*. *Orations* are Pleadings, Speeches of Counſel, Laudatives, Invectives, Apologies, Reprehenſions, Orations of Formality or Ceremony, and the like. Letters are according to all the variety of occaſions, Advertiſements, Advices, Directions, Propoſitions, Petitions, Commendatory, Expoſtulatory, Satisfactory; of Compliment, of Pleaſure, of Diſcourſe, and all other paſſages of Action. And ſuch as are Written from Wiſe men, are of all the words of Man, in my judgment, the beſt; for they are more Natural than Orations and public ſpeeches, and more adviſed than conferences or preſent ſpeeches. So again Letters of Affairs from ſuch as Manage them, or are privy to them, are of all others the beſt inſtructions for Hiſtory, and to a diligent Reader the beſt Hiſtories in themſelves. For *Apophthegms*, it is a great loſs of that Book of *Cæſar's;* for as his Hiſtory, and thoſe few Letters of his which we have, and thoſe Apophthegms which were of his own,

excel all men's elſe, ſo I ſuppoſe would his Collection of *Apophthegms* have done; for as for thoſe which are Collected by others, either I have no taſte in ſuch Matters, or elſe their choice hath not been happy. But upon theſe three kinds of Writings I do not inſiſt, becauſe I have no deficiencies to propound concerning them.

Thus much therefore concerning Hiſtory; which is that part of Learning which anſwereth to one of the Cells, *Domiciles*, or offices of the mind of Man: which is that of the Memory.

Poeſy is a part of Learning in meaſure of Words for the moſt part reſtrained, but in all other points extremely licenſed, and doth truly refer to the Imagination; which, being not tied to the Laws of Matter, may at pleaſure join that which Nature hath ſevered, and ſever that which Nature hath joined; and ſo make unlawful Matches and Divorces of things; *Pictoribus atque Poetis, &c.* It is taken in two ſenſes in reſpect of Words or Matter; in the firſt ſenſe it is but a *Character* of ſtyle, and belongeth to Arts of ſpeech, and is not pertinent for the preſent: in the latter, it is, as hath been ſaid, one of the principal portions of Learning, and is nothing elſe but *Feigned Hiſtory*, which may be ſtyled as well in Proſe as in Verſe.

The Uſe of this *Feigned Hiſtory* hath been to give ſome ſhadow of ſatisfaction to the mind of Man in thoſe points wherein the Nature of things doth deny it, the World being in proportion inferior to the ſoul; by reaſon whereof there is, agree-

able to the ſpirit of Man, a more ample Greatneſs, a more exact Goodneſs, and a more abſolute variety, than can be found in the Nature of things. Therefore, becauſe the acts or events of *true Hiſtory* have not that Magnitude which ſatisfieth the mind of Man, *Poeſy* feigneth Acts and Events Greater and more Heroical: becauſe *true Hiſtory* propoundeth the ſucceſſes and iſſues of actions not ſo agreeable to the merits of Virtue and Vice, therefore *Poeſy* feigns them more juſt in Retribution, and more according to Revealed providence: becauſe *true Hiſtory* repreſenteth Actions and Events more ordinary, and leſs interchanged, therefore *Poeſy* endueth them with more Rareneſs, and more unexpected and alternative Variations: ſo as it appeareth that, *Poeſy* ſerveth and conferreth to Magnanimity, Morality, and to Delectation. And therefore it was ever thought to have ſome participation of Divineneſs, becauſe it doth raiſe and erect the Mind, by ſubmitting the ſhews of things to the deſires of the Mind; whereas reaſon doth buckle and bow the Mind unto the Nature of things. And we ſee, that by theſe inſinuations and congruities with man's nature and pleaſure, joined alſo with the agreement and conſort it hath with Muſic, it hath had acceſs and eſtimation in rude times and barbarous Regions, where other Learning ſtood excluded.

The diviſion of *Poeſy* which is apteſt in the propriety thereof, (beſides thoſe diviſions which are common unto it with Hiſtory, as feigned Chroni-

cles, feigned Lives, and the Appendices of Hiſtory, as feigned Epiſtles, feigned Orations, and the reſt) is into *Poeſy Narrative*, *Repreſentative*, and *Alluſive*.

The *Narrative* is a mere imitation of Hiſtory, with the exceſſes before remembered; chooſing for ſubject commonly Wars and Love, rarely State, and ſometimes Pleaſure or Mirth.

Repreſentative is as a viſible Hiſtory; and is an Image of Actions as if they were preſent, as Hiſtory is of actions in nature as they are, that is paſt.

Alluſive or *Parabolical* is a *Narration* applied only to expreſs ſome ſpecial purpoſe or conceit: which latter kind of Parabolical wiſdom was much more in uſe in the ancient times, as by the Fables of *Æſop*, and the brief ſentences of the Seven, and the *uſe* of *Hieroglyphics*, may appear. And the cauſe was, for that it was then of neceſſity to expreſs any point of reaſon, which was more ſharp or ſubtile than the vulgar in that manner; becauſe men in thoſe times wanted both variety of examples and ſubtilty of Conceit: and as *Hieroglyphics* were before Letters, ſo Parables were before Arguments: And nevertheleſs now, and at all times, they do retain much life and vigour; becauſe reaſon cannot be ſo ſenſible, nor examples ſo fit.

But there remaineth yet another uſe of *Poeſy Parabolical*, oppoſite to that which we laſt mentioned: for that tendeth to demonſtrate and illuſtrate that which is taught or delivered, and this other to re-

tire and obſcure it: that is, when the Secrets and Myſteries of Religion, Policy, or Philoſophy, are involved in Fables or Parables. Of this in Divine Poeſy we ſee the uſe is authorized. In Heathen Poeſy we ſee the expoſition of Fables doth fall out ſometimes with great felicity; as in the Fable that the Giants being overthrown in their War againſt the Gods, the Earth their mother in revenge thereof brought forth Fame:

Illam Terra Parens, irâ irritata Deorum,
Extremam, ut perhibent, Cœo Enceladoque Sororem
Progenuit.

expounded, that when Princes and Monarchs have ſuppreſſed actual and open Rebels, then the malignity of the people, which is the mother of Rebellion, doth bring forth Libels and ſlanders, and taxations of the State, which is of the ſame kind with Rebellion, but more Feminine. So in the Fable, that the reſt of the Gods having conſpired to bind *Jupiter*, *Pallas* called *Briareus* with his hundred hands to his aid, expounded, that Monarchies need not fear any curbing of their abſoluteneſs by Mighty Subjects, as long as by Wiſdom they keep the hearts of the people, who will be ſure to come in on their ſide. So in the Fable, that *Achilles* was brought up under *Chiron* the *Centaur*, who was part a Man and part a Beaſt, Expounded Ingeniouſly, but corruptly by *Machiavel*, that it belongeth to the education and diſcipline of Princes to know as well how to play the part of the Lion

in violence, and the Fox in guile, as of the Man in virtue and Juſtice. Nevertheleſs, in many the like encounters, I do rather think that the fable was firſt, and the expoſition then deviſed, than that the Moral was firſt, and hereupon the Fable framed. For I find it was an ancient vanity in *Chryſippus*, that troubled himſelf with great contention to faſten the aſſertions of the *Stoics* upon the fictions of the ancient Poets; but yet that all the Fables and fictions of the Poets were but pleaſure and not figure, I interpoſe no opinion. Surely of thoſe Poets which are now extant, even *Homer* himſelf (notwithſtanding he was made a kind of Scripture by the latter Schools of the *Grecians*,) yet I ſhould without any difficulty pronounce that his Fables had no ſuch inwardneſs in his own meaning; but what they might have upon a more original tradition, is not eaſy to affirm; for he was not the inventor of many of them.

In this third Part of Learning, which is Poeſy, I can report no deficience. For being as a plant that cometh of the luſt of the earth, without a formal ſeed, it hath ſprung up and ſpread abroad more than any other kind: but to aſcribe unto it that which is due, for the expreſſing of affections, paſſions, corruptions, and cuſtoms, we are beholding to Poets more than to the Philoſophers' works; and for Wit and Eloquence, not much leſs than to Orators' harangues. But it is not good to ſtay too long in the Theatre. Let us now paſs on to the Judicial Place or Palace of the Mind, which we

are to approach and view with more reverence and attention.

The Knowledge of Man is as the waters, ſome deſcending from above, and ſome ſpringing from beneath; the one informed by the light of Nature, the other inſpired by divine revelation. The light of Nature conſiſteth in the Notions of the mind and the Reports of the Senſes: for as for Knowledge which Man receiveth by teaching, it is Cumulative and not Original; as in a water that, beſides his own ſpring-head, is fed with other Springs and Streams. So then, according to theſe two differing Illuminations or Originals, Knowledge is firſt of all divided into *Divinity* and *Philoſophy*.

In *Philoſophy*, the contemplations of Man do either penetrate *unto* GOD,—or are circumferred to *Nature*,—or are reflected or reverted upon *himſelf*. Out of which ſeveral inquiries there do ariſe three Knowledges, *Divine Philoſophy*, *Natural Philoſophy*, and *Human Philoſophy* or *Humanity*. For all things are marked and ſtamped with this triple Character, of the power of GOD, the difference of Nature, and the uſe of Man. But becauſe the diſtributions and partitions of Knowledge are not like ſeveral lines that meet in one Angle, and ſo touch but in a point; but are like branches of a Tree, that meet in a ſtem, which hath a dimenſion and quantity of entireneſs and continuance, before it come to diſcontinue and break itſelf into Arms and boughs: therefore it is good, before we enter into the former diſtribution, to erect and conſtitute

one universal Science, by the name of *Philosophia Prima*, *Primitive* or *Summary Philosophy*, as the Main and common way, before we come where the ways part and divide themselves; which Science whether I should report as deficient or not, I stand doubtful. For I find a certain Rhapsody of *Natural Theology*, and of divers parts of *Logic;* and of that part of *Natural Philosophy* which concerneth the *Principles;* and of that other part of *Natural Philosophy* which concerneth the *Soul* or *Spirit:* all these strangely commixed and confused; but being examined, it seemeth to me rather a depredation of other Sciences, advanced and exalted unto some height of terms, than any thing solid or substantive of itself. Nevertheless I cannot be ignorant of the distinction which is current, that the same things are handled but in several respects. As for example, that Logic considereth of many things as they are in Notion, and this Philosophy as they are in Nature; the one in Appearance, the other in Existence; but I find this difference better made than pursued. For if they had considered *Quantity*, *Similitude*, *Diversity*, and the rest of those *External Characters* of things, as *Philosophers*, and in Nature, their inquiries must of force have been of a far other kind than they are. For doth any of them, in handling Quantity, speak of the force of Union, how and how far it multiplieth Virtue? Doth any give the reason, why some things in Nature are so common, and in so great Mass, and others so rare, and in so small quantity? Doth

any, in handling Similitude and Diverſity, aſſign the cauſe why Iron ſhould not move to Iron, which is more like, but move to the Load-ſtone, which is leſs like? Why in all Diverſities of things there ſhould be certain Participles in Nature, which are almoſt ambiguous to which kind they ſhould be referred? But there is a mete and deep ſilence touching the Nature and operation of thoſe *Common adjuncts* of things, as in nature; and only a reſuming and repeating of the force and uſe of them in ſpeech or argument. Therefore, becauſe in a Writing of this Nature, I avoid all ſubtilty, my meaning touching this Original or Univerſal Philoſophy is thus, in a plain and groſs deſcription by Negative: *That it be a Receptacle for all ſuch profitable obſervations and Axioms as fall not within the compaſs of any of the ſpecial parts of Philoſophy or Sciences, but are more common and of a higher ſtage.*

Now that there are many of that kind, need not to be doubted. For example: is not the rule, *Si inæqualibus æqualia addas, omnia erunt inæqualia*, an Axiom as well of Juſtice as of the Mathematics? and is there not a true coincidence between commutative and diſtributive Juſtice, and Arithmetical and Geometrical proportion? Is not that other rule, *Quæ in eodem tertio conveniunt, et inter ſe conveniunt*, a Rule taken from the Mathematics, but ſo potent in Logic as all Syllogiſms are built upon it? Is not the obſervation, *Omnia mutantur, nil interit*, a contemplation, in Philoſophy thus,

that the *Quantum* of Nature is eternal? in Natural Theology thus, that it requireth the ſame Omnipotence to make ſomewhat Nothing, which at the firſt made nothing ſomewhat? according to the Scripture, *Didici quòd omnia opera, quæ fecit Deus, perſeverent in perpetuum; non poſſumus eis quicquam addere nec auferre.* Is not the ground, which *Machiavel* wiſely and largely diſcourſeth concerning Governments, that the way to eſtabliſh and preſerve them, is to reduce them *ad Principia*, a rule in Religion and Nature, as well as in Civil adminiſtration? Was not the *Perſian* Magic a reduction or correſpondence of the Principles and Architectures of Nature to the rules and policy of Governments? Is not the precept of a Muſician, to fall from a diſcord or harſh accord upon a concord or ſweet accord, alike true in affection? Is not the Trope of Muſic, to avoid or ſlide from the cloſe or Cadence, common with the Trope of Rhetoric of deceiving expectation? Is not the delight of the Quavering upon a ſtop in Muſic the ſame with the playing of Light upon the water?

Splendet tremulo ſub Lumine Pontus.

Are not the Organs of the ſenſes of one kind with the Organs of Reflection, the eye with a glaſs, the Ear with a Cave or Strait determined and bounded? Neither are theſe only ſimilitudes, as men of narrow obſervation may conceive them to be, but the ſame footſteps of Nature, treading or printing upon ſeveral Subjects or Matters. This Science, there-

fore, as I underſtand it, I may juſtly report as deficient: for I ſee ſometimes the profounder ſort of Wits, in handling ſome particular argument, will now and then draw a Bucket of Water out of this Well for their preſent uſe; but the ſpring-head thereof ſeemeth to me not to have been viſited: being of ſo excellent uſe, both for the diſcloſing of Nature, and the abridgement of Art.

This Science being therefore firſt placed as a common parent like unto *Berecynthia*, which had ſo much Heavenly iſſue, *Omnes Cælicolas, omnes ſuper alta tenentes:* we may return to the former diſtribution of the three Philoſophies, Divine, Natural, and Human.

And as concerning *Divine Philoſophy* or *Natural Theology*, it is that Knowledge or Rudiment of Knowledge concerning GOD, which may be obtained by the contemplation of his Creatures; which Knowledge may be truly termed Divine in reſpect of the object, and Natural in reſpect of the Light. The bounds of this Knowledge are, that it ſufficeth to convince Atheiſm, but not to inform Religion: and therefore there was never Miracle wrought by GOD to convert an Atheiſt, becauſe the light of Nature might have led him to confeſs a GOD: but Miracles have been wrought to convert Idolaters and the ſuperſtitious, becauſe no light of Nature extendeth to declare the will and true worſhip of GOD. For as all works do ſhew forth the power and ſkill of the workman, and not his Image; ſo it is of the works of GOD, which do ſhew the Om-

nipotency and Wiſdom of the Maker, but not his Image: and therefore therein the Heathen opinion differeth from the Sacred truth; for they ſuppoſed the world to be the Image of God, and Man to be an extract or compendious Image of the world; but the Scriptures never vouchſafe to attribute to the world that honour, as to be the Image of God, but only *the work of his hands;* neither do they ſpeak of any other Image of God, but Man: wherefore by the contemplation of Nature to induce and inforce the acknowledgement of God, and to demonſtrate his power, providence, and goodneſs, is an excellent argument, and hath been excellently handled by divers.

But on the other ſide, out of the contemplation of Nature, or ground of Human Knowledge, to induce any verity or perſuaſion concerning the points of Faith, is in my judgment not ſafe: *Da fidei quæ fidei ſunt.* For the Heathens themſelves conclude as much in that excellent and Divine fable of the Golden Chain: *That men and Gods were not able to draw Jupiter down to the Earth; but contrariwiſe, Jupiter was able to draw them up to Heaven.*

So as we ought not to attempt to draw down or ſubmit the Myſteries of God to our Reaſon; but contrariwiſe to raiſe and advance our Reaſon to the Divine Truth. So as in this part of Knowledge, touching Divine Philoſophy, I am ſo far from noting any deficience, as I rather note an exceſs: whereunto I have digreſſed! becauſe of the ex-

treme prejudice which both Religion and Philoſophy have received and may receive, by being commixed together; as that which undoubtedly will make an Heretical Religion, and an Imaginary and fabulous Philoſophy.

Otherwiſe it is of the Nature of Angels and Spirits, which is an Appendix of Theology, both Divine and Natural, and is neither inſcrutable nor interdicted; for although the Scripture ſaith, *Let no man deceive you in Sublime diſcourſe touching the worſhip of Angels, preſſing into that he knoweth not, &c.* yet, notwithſtanding, if you obſerve well that precept, it may appear thereby that there be two things only forbidden, Adoration of them, and Opinion Fantaſtical of them, either to extol them farther than appertaineth to the degree of a Creature, or to extol a man's Knowledge of them farther than he hath ground. But the ſober and grounded inquiry, which may ariſe out of the paſſages of holy Scriptures, or out of the gradations of Nature, is not reſtrained. So of degenerate and revolted ſpirits, the converſing with them or the employment of them is prohibited, much more any veneration towards them but the contemplation or Science of their Nature, their power, their illuſions, either by Scripture or reaſon, is a part of ſpiritual Wiſdom. For ſo the Apoſtle ſaith, *We are not ignorant of his Stratagems.* And it is no more unlawful to inquire the Nature of evil ſpirits, than to inquire the force of poiſons in Nature, or the Nature of ſin and vice in Morality. But this part touching

Angels and Spirits I cannot note as deficient, for many have occupied themſelves in it; I may rather challenge it, in many of the Writers thereof, as fabulous and fantaſtical.

Leaving therefore *Divine Philoſophy* or *Natural Theology* (not *Divinity* or *Inſpired Theology*, which we reſerve for the laſt of all, as the Haven and Sabbath of all Man's contemplations) we will now proceed to *Natural Philoſophy*.

If then it be true that *Democritus* ſaid, *That the Truth of Nature lieth hid in certain deep Mines and Caves:* and if it be true likewiſe that the *Alchemiſts* do ſo much inculcate, that *Vulcan* is a ſecond Nature, and imitateth that dexterouſly and compendiouſly, which Nature worketh by ambages and length of time, it were good to divide Natural Philoſophy into the Mine and the Furnace: and to make two profeſſions or occupations of Natural Philoſophers, ſome to be Pioneers and ſome Smiths; ſome to dig, and ſome to refine and Hammer: and ſurely I do beſt allow of a diviſion of that kind, though in more familiar and Scholaſtical terms; namely, that theſe be the two parts of Natural Philoſophy,—the *Inquiſition of Cauſes*, and the *Production of Effects; Speculative*, and *Operative; Natural Science*, and *Natural Prudence*. For as in Civil matters there is a Wiſdom of diſcourſe, and a Wiſdom of direction; ſo is it in Natural. And here I will make a requeſt, that for the latter, or at leaſt for a part thereof, I may revive and reintegrate the miſapplied and

abuſed Name of *Natural Magic;* which, in the true ſenſe, is but *Natural Wiſdom*, or *Natural Prudence;* taken according to the ancient acceptation; purged from vanity and ſuperſtition. Now although it be true, and I know it well, that there is an intercourſe between *Cauſes* and *Effects*, ſo as both theſe Knowledges, *Speculative* and *Operative*, have a great connection between themſelves; yet becauſe all true and fruitful *Natural Philoſophy* hath *a double Scale* or *Ladder*, *Aſcendent* and *Deſcendent;* aſcending from experiments to the *Invention of cauſes*, and deſcending from cauſes to the *Invention of new experiments;* therefore I judge it moſt requiſite that theſe two parts be ſeverally conſidered and handled.

Natural Science or *Theory* is divided into *Phyſique* and *Metaphyſique:* wherein I deſire it may be conceived that I uſe the word *Metaphyſique* in a differing ſenſe from that that is received: and in like manner, I doubt not but it will eaſily appear to men of judgment, that in this and other particulars, whereſoever my Conception and Notion may differ from the Ancient, yet I am ſtudious to keep the Ancient Terms. For hoping well to deliver myſelf from miſtaking, by the order and perſpicuous expreſſing of that I do propound; I am otherwiſe zealous and affectionate to recede as little from Antiquity, either in terms or opinions, as may ſtand with truth and the proficience of Knowledge. And herein I cannot a little marvel att he Philoſopher *Ariſtotle*, that did proceed in

ſuch a Spirit of difference and contradiction towards all Antiquity: undertaking not only to frame new words of Science at pleaſure, but to confound and extinguiſh all ancient Wiſdom: inſomuch as he never nameth or mentioneth an Ancient Author or opinion, but to confute and reprove; wherein for glory, and drawing followers and diſciples, he took the right courſe. For certainly there cometh to paſs, and hath place in human truth, that which was noted and pronounced in the higheſt truth: *Veni in nomine Patris, nec recipitis Me; Si quis venerit in nomine ſuo, eum recipietis.* But in this divine Aphoriſm, (conſidering to whom it was applied, namely to *Antichriſt*, the higheſt deceiver,) we may diſcern well that *the coming in a Man's own name*, without regard of *Antiquity* or *Paternity*, is no good ſign of truth, although it be joined with the fortune and ſucceſs of an *Eum recipietis*. But for this excellent perſon *Ariſtotle*, I will think of him that he learned that humour of his Scholar, with whom, it ſeemeth, he did emulate; the one to conquer all Opinions, as the other to conquer all Nations; wherein nevertheleſs, it may be, he may at ſome men's hands, that are of a bitter diſpoſition, get a like title as his Scholar did:

Felix terrarum Prædo, non utile mundo,
Editus exemplum, &c.

So,

Felix doctrinæ Prædo.

But to me, on the other ſide, that do deſire as much

as lieth in my Pen to ground a ſociable intercourſe between Antiquity and Proficience, it ſeemeth beſt to keep way with Antiquity *uſque ad aras;* and therefore to retain the ancient terms, though I ſometimes alter the uſes and definitions, according to the Modern proceeding in Civil Government; where although there be ſome alteration, yet that holdeth which *Tacitus* wiſely noteth, *Eadem Magiſtratuum vocabula.*

To return therefore to the uſe and acceptation of the term *Metaphyſique*, as I do now underſtand the Word; it appeareth, by that which hath been already ſaid, that I intend *Philoſophia Prima*, *Summary Philoſophy*, and *Metaphyſique*, which heretofore have been confounded as one, to be two diſtinct things. For, the one I have made as a Parent or common Anceſtor to all Knowledge; and the other I have now brought in as a Branch or deſcendant of *Natural Science*. It appeareth likewiſe that I have aſſigned to *Summary Philoſophy* the common principles and Axioms which are promiſcuous and indifferent to ſeveral Sciences: I have aſſigned unto it likewiſe the inquiry touching *the operation of the Relative and Adventitious Characters of Eſſences*, as *Quantity*, *Similitude*, *Diverſity*, *Poſſibility*, and the reſt: with this diſtinction and proviſion; that they be handled as they have efficacy in Nature, and not Logically. It appeareth likewiſe, that *Natural theology*, which heretofore hath been handled confuſedly with *Metaphyſique*, I have incloſed and bounded by itſelf. It is there-

fore now a queſtion what is left remaining for *Metaphyſique*; wherein I may without prejudice preſerve thus much of the conceit of Antiquity, that *Phyſique* ſhould contemplate that which is inherent in Matter, and therefore tranſitory; and *Metaphyſique* that which is abſtracted and fixed. And again, that *Phyſique* ſhould handle that which ſuppoſeth in Nature only a being and moving; and *Metaphyſique* ſhould handle that which ſuppoſeth further in Nature a reaſon, underſtanding, and platform. But the difference, perſpicuouſly expreſſed, is moſt familiar and ſenſible. For as we divided *Natural Philoſophy* in *General* into the *Inquiry* of *Cauſes*, and *Productions* of *Effects*; ſo that part which concerneth the *Inquiry* of *Cauſes* we do ſubdivide according to the receivedand ſound diviſion of *Cauſes*; the one part, which is *Phyſique*, inquireth and handleth the *Material* and *Efficient Cauſes*; and the other, which is *Metaphyſique*, handleth the *Formal* and *Final Cauſes*.

Phyſique, taking it according to the derivation, and not according to our Idiom for *Medicine*, is ſituate in a middle term or diſtance between *Natural Hiſtory* and *Metaphyſique*. For *Natural Hiſtory* deſcribeth the *variety of things*; *Phyſique*, the *Cauſes*, but *Variable* or *Reſpective Cauſes*; and *Metaphyſique*, the *Fixed* and *Conſtant Cauſes*.

Limus ut hic dureſcit, et hæc ut Cera liqueſcit,
Uno eodemque igni:

Fire is the cauſe of induration, but reſpective to clay; Fire is the cauſe of colliquation, but reſpec-

tive to wax; but fire is no conſtant cauſe either of induration or colliquation: ſo then the Phyſical cauſes are but the Efficient and the Matter. *Phyſique* hath three parts; whereof two reſpect Nature *United or collected*, the third contemplateth Nature *diffuſed* or *diſtributed*. Nature is collected either into one entire *Total*, or elſe into the ſame *Principles* or *Seeds*. So as the firſt doctrine is *Touching* the *Contexture* or *Configuration* of *Things*, as *De Mundo*, *de Univerſitate Rerum*. The ſecond is the Doctrine *Concerning* the *Principles* or *Originals* of *Times*. The third is the Doctrine *Concerning* all *Variety* and *Particularity* of *Things*; whether it be of the differing ſubſtances, or their differing qualities and Natures; whereof there needeth no enumeration, this part being but as a *Gloſs*, or *Paraphraſe*, that attendeth upon the *Text* of *Natural Hiſtory*. Of theſe three I cannot report any as deficient. In what truth or perfection they are handled, I make not now any Judgment; but they are parts of Knowledge not deſerted by the Labour of Man.

For *Metaphyſique*, we have aſſigned unto it the Inquiry of *Formal* and *Final Cauſes*; which aſſignation, as to the former of them, may ſeem to be Nugatory and void; becauſe of the received and inveterate Opinion, that the inquiſition of Man is not competent to find out *Eſſential forms* or *True differences*: of which Opinion we will take this hold, that the Invention of Forms is of all other parts of Knowledge the worthieſt to be ſought, if

it be poſſible to be found. As for the poſſibility, they are ill Diſcoverers that think there is no Land, when they can ſee nothing but Sea. But it is manifeſt that *Plato*, in his Opinion of *Ideas*, as one that had a wit of elevation ſituate as upon a Cliff, did deſcry, *That forms were the true object of knowledge;* but loſt the real fruit of his opinion, by conſidering of forms as abſolutely abſtracted from matter, and not confined and determined by matter; and ſo turning his opinion upon *Theology*, wherewith all his Natural Philoſophy is infected. But if any man ſhall keep a continual watchful and ſevere eye upon action, operation, and the uſe of Knowledge, he may adviſe and take Notice what are the *Forms*, the diſcloſures whereof are fruitful and important to the State of man. For as to the *Forms* of ſubſtances, Man only except, of whom it is ſaid, *Formavit hominem de limo terræ, et ſpiravit in faciem ejus ſpiraculum vitæ*, and not as of all other Creatures, *Producant aquæ, producat terra; the forms of ſubſtances*, I ſay, as they are now by compounding and tranſplanting multiplied, are ſo perplexed, as they are not to be inquired; no more than it were either poſſible or to purpoſe to ſeek in groſs *the forms of thoſe ſounds which make words*, which by compoſition and tranſpoſition of Letters are infinite. But, on the other ſide, to inquire the *form of thoſe Sounds or Voices which make ſimple Letters*, is eaſily comprehenſible; and being known, induceth and manifeſteth *the forms of all words*, which conſiſt and are compounded of them. In

the ſame manner to inquire *the form* of a Lion, of an Oak, of Gold; nay, of Water, of Air, is a vain purſuit: but to inquire *the forms* of Senſe, of voluntary Motion, of Vegetation, of Colours, of Gravity and Levity, of Denſity, of Tenuity, of Heat, of Cold, and all other Natures and qualities, which, like an *Alphabet*, are not many, and of which the eſſences, upheld by Matter, of all Creatures do conſiſt; to inquire, I ſay, *the true forms* of theſe, is that part of *Metaphyſique* which we now define of. Not but that *Phyſic* doth make inquiry, and take conſideration of the ſame Natures: but how? Only as to the *material and efficient cauſes* of them, and not as to *the forms*. For example; if the *cauſe* of *whiteneſs* in *Snow* or *Froth* be inquired, and it be rendered thus, *that the ſubtile intermixture of Air and water is the cauſe*, it is well rendered; but nevertheleſs, is this *the form* of *whiteneſs?* No; but it is *the efficient*, which is ever but *vehiculum formæ*. This part of *Metaphyſique* I do not find laboured and performed: whereat I marvel not: becauſe I hold it not poſſible to be invented by that courſe of invention which hath been uſed; in regard that men, which is the Root of all error, have made too untimely a departure and too remote a receſs from particulars.

But the uſe of this part of *Metaphyſique*, which I report as deficient, is of the reſt the moſt excellent in two reſpects: the one, becauſe it is the duty and virtue of all Knowledge to abridge the infinity of individual experience, as much as the concep-

tion of Truth will permit, and to remedy the complaint of *Vita brevis, ars longa;* which is performed by uniting the Notions and Conceptions of Sciences: for Knowledges are as *Pyramids*, whereof *Hiſtory* is the *Baſis*. So of *Natural Philoſophy*, the *Baſis* is *Natural Hiſtory;* the *Stage* next the *Baſis* is *Phyſique;* the *Stage* next the *Vertical point* is *Metaphyſique*. As for the *Vertical Point*, *Opus quod operatur Deus à principio uſque ad finem*, *the Summary Law of Nature*, we know not whether Man's inquiry can attain unto it. But theſe three be the true *Stages* of Knowledge, and are to them that are depraved no better than the Giant's Hills:

Ter ſunt conati imponere Pelio Oſſam,
Scilicet, atque Oſſæ frondoſum involvere Olympum.

But to thoſe which refer all things to the Glory of God, they are as the three acclamations, *Sancte, Sancte, Sancte;* holy in the deſcription or dilatation of his works; holy in the connection or concatenation of them; and holy in the union of them in a perpetual and uniform law. And therefore the ſpeculation was excellent in *Parmenides* and *Plato*, although but a ſpeculation in them, that all things by ſcale did aſcend to unity. So then always that knowledge is worthieſt which is charged with leaſt multiplicity; which appeareth to be *Metaphyſique;* as that which conſidereth *the ſimple forms or differences of things*, which are few in number, and *the degrees* and *co-ordinations* whereof make all this variety.

The ſecond reſpect, which valueth and commendeth this part of *Metaphyſique*, is that it doth enfranchiſe the power of Man unto the greateſt liberty and poſſibility of works and effects. For Phyſique carrieth men in narrow and reſtrained ways, ſubject to many accidents of impediments, imitating the ordinary flexuous courſes of Nature; but *Latæ undique ſunt ſapientibus viæ:* to ſapience, which was anciently defined to be *Rerum divinarum et humanarum ſcientia*, there is ever choice of Means: for *Phyſical cauſes* give light to new invention in *Simili materia*. But whoſoever knoweth any *form*, knoweth the utmoſt *poſſibility* of *ſuperinducing* that *Nature* upon *any variety of matter;* and ſo is leſs reſtrained in operation, either to the *Baſis* of the *matter*, or the *condition* of the *efficient;* which kind of knowledge *Solomon* likewiſe, though in a more Divine ſort, elegantly deſcribeth: *Non arctabuntur greſſus tui, et currens non habebis offendiculum.* The ways of ſapience are not much liable either to particularity or chance.

The ſecond part of *Metaphyſique* is the *inquiry* of *Final Cauſes*, which I am moved to report not as omitted, but as miſplaced; and yet if it were but a fault in order, I would not ſpeak of it: for order is matter of illuſtration, but pertaineth not to the ſubſtance of Sciences. But this miſplacing hath cauſed a deficience, or at leaſt a great improficience in the Sciences themſelves. For the handling of *final cauſes*, mixed with the reſt in *Phyſical Inquiries*, hath intercepted the ſevere and

diligent inquiry of all *Real and Phyſica l Cauſes*, and given men the occaſion to ſtay upon theſe *ſatisfactory and ſpecious cauſes*, to the great arreſt and prejudice of further Diſcovery. For this I find done not only by *Plato*, who ever anchoreth upon that ſhore, but by *Ariſtotle*, *Galen*, and others which do uſually likewiſe fall upon theſe flats *of diſcourſing cauſes*. For to ſay that the hairs of the *Eye-lids are for a quickſet and fence about the Sight; or that the firmneſs of the Skins and Hides of living Creatures is to defend them from the extremities of heat or cold; or that the bones are for the Columns or Beams, whereupon the frames of the bodies of living Creatures are built; or that the leaves of Trees are for protecting of the Fruit; or that the Clouds are for watering of the Earth; or that the ſolidneſs of the Earth is for the ſtation and manſion of living Creatures*, and the like, is well inquired and collected in *Metaphyſique;* but in *Phyſique* they are impertinent. Nay, they are indeed but *Remoras*, and hinderances to ſtay and ſlug the ſhip from further ſailing; and have brought this to paſs, that the ſearch of the *Phyſical Cauſes* hath been neglected, and paſſed in ſilence. And therefore the natural Philoſophy of *Democritus* and ſome others, (who did not ſuppoſe a *mind* or *Reaſon* in the frame of things, but attributed the *form thereof able to maintain itſelf, to infinite eſſays or proofs of Nature*, which they term *Fortune*) ſeemeth to me, as far as I can judge by the recital and fragments which remain unto us, in particularities of Phyſical

cauſes, more real and better inquired than that of *Ariſtotle* and *Plato;* whereof both intermingled *final cauſes*, the one as a part of *Theology*, and the other as a part of *Logic*, which were the *favourite ſtudies* reſpectively of both thoſe perſons. Not becauſe thoſe *final cauſes* are not true, and worthy to be inquired, being kept within their own province; but becauſe their excurſions into the limits of *Phyſical cauſes* hath bred a vaſtneſs and ſolitude in that Track. For otherwiſe, keeping their precincts and Borders, men are extremely deceived if they think there is an Enmity or repugnancy at all between them. For the cauſe rendered, that *the Hairs about the eye-lids are for the ſafeguard of the ſight*, doth not impugn the cauſe rendered, *that Piloſity is incident to Orifices of Moiſture; Muſcoſi fontes, &c.* Nor the cauſe rendered, *that the firmneſs of Hides is for the armour of the body againſt extremities of heat or cold*, doth not impugn the cauſe rendered, *that contraction of pores is incident to the outwardeſt parts, in regard of their adjacence to foreign or unlike bodies;* and ſo of the reſt: both Cauſes being true and Compatible, the one declaring an *Intention*, the other a *Conſequence* only.

Neither doth this call in queſtion, or derogate from Divine Providence, but highly confirm and exalt it. For as in civil actions he is the greater and deeper politician, that can make other men the Inſtruments of his will and ends, and yet never acquaint them with his purpoſe, ſo as they ſhall do it and yet not know what they do, than he that

imparteth his meaning to thoſe he employeth; ſo is the Wiſdom of God more admirable, when nature intendeth one Thing, and Providence draweth forth another, than if he had communicated to particular Creatures and Motions the Characters and Impreſſions of his Providence. And thus much for *Metaphyſique:* the latter part whereof I allow as extant, but wiſh it confined to its proper place.

Nevertheleſs there remaineth yet another part of *Natural Philoſophy*, which is commonly made a principal part, and holdeth rank with *Phyſique* ſpecial and *Metaphyſique*, which is *Mathematique*; but I think it more agreeable to the nature of things, and to the light of order, to place it as a Branch of *Metaphyſique:* for the ſubject of it being *Quantity*, (not *Quantity Indefinite*, which is but a *Relative*, and belongeth to *Philoſophia prima*, as hath been ſaid, but *Quantity determined or proportionable*), it appeareth to be one of the *eſſential forms* of things; as that that is cauſative in nature of a number of effects; inſomuch as we ſee, in the Schools both of *Democritus* and of *Pythagoras*, that the one *did aſcribe Figure to the firſt ſeeds of things*, and the other *did ſuppoſe numbers to be the principles and originals of things:* and it is true alſo that of all other forms, as we underſtand forms, it is the moſt abſtracted and ſeparable from matter, and therefore moſt proper to *Metaphyſique;* which hath likewiſe been the cauſe why it hath been better laboured and inquired than any of the other *forms*, which are more immerſed in Matter.

For it being the Nature of the Mind of Man, to the extreme prejudice of knowledge, to delight in the ſpacious liberty of generalities, as in a champain Region, and not in the incloſures of particularity; the *Mathematics* of all other knowledge were the goodlieſt fields to ſatisfy that appetite.

But for the placing of this Science, it is not much Material: only we have endeavoured, in theſe our Partitions, to obſerve a kind of perſpective, that one part may caſt light upon another.

The *Mathematics* are either *Pure* or *Mixed*. To the *Pure Mathematics* are thoſe Sciences belonging which handle *Quantity determinate*, merely ſevered from any Axioms of *Natural Philoſophy;* and theſe are two, *Geometry* and *Arithmetic;* the one handling Quantity continued, and the other diſſevered.

Mixed hath for ſubject ſome Axioms or parts of Natural Philoſophy, and conſidereth Quantity determined, as it is auxiliary and incident unto them.

For many parts of Nature can neither be invented with ſufficient ſubtilty, nor demonſtrated with ſufficient perſpicuity, nor accommodated unto uſe with ſufficient dexterity, without the aid and intervening of the Mathematics; of which ſort are *Perſpective*, *Muſic*, *Aſtronomy*, *Coſmography*, *Architecture*, *Enginery*, and divers others.

In the *Mathematics* I can report no deficience, except it be that men do not ſufficiently underſtand the excellent uſe of *the pure Mathematics*, in that they do remedy and cure many defects in the Wit

and Faculties Intellectual. For if the Wit be too dull, they ſharpen it; if too wandering, they fix it; if too inherent in the ſenſe, they abſtract it. So that as Tennis is a Game of no uſe in itſelf, but of great uſe in reſpect it maketh a quick eye and a body ready to put itſelf into all poſtures; ſo in the Mathematics, that uſe which is collateral and intervenient is no leſs worthy than that which is principal and intended. And as for the *Mixed Mathematics*, I may only make this prediction, that there cannot fail to be more kinds of them, as Nature grows further diſcloſed. Thus much of *Natural Science*, or the part of Nature *Speculative*.

For *Natural Prudence*, or the part *Operative* of *Natural Philoſophy*, we will divide it into three parts, *Experimental*, *Philoſophical*, and *Magical*; which three parts *Active* have a correſpondence and Analogy with the three parts *Speculative*, *Natural Hiſtory*, *Phyſique*, and *Metaphyſique*: for many operations have been invented, ſometimes by a caſual incidence and occurrence, ſometimes by a purpoſed experiment: and of thoſe which have been found by an intentional experiment, ſome have been found out by varying or extending the ſame experiment, ſome by transferring and compounding divers experiments the one into the other, which kind of invention an Empiric may manage.

Again, by the knowledge of Phyſical cauſes there cannot fail to follow many indications and deſignations of new particulars, if men in their ſpeculation will keep one eye upon uſe and prac-

tice. But theſe are but Coaſtings along the ſhore, *Premendo littus iniquum:* for, it ſeemeth to me there can hardly be Diſcovered any radical or fundamental alterations and innovations in Nature, either by the Fortune and Eſſays of experiments, or by the light and direction of Phyſical cauſes. If therefore we have reported *Metaphyſique* deficient, it muſt follow that we do the like of *Natural Magic*, which hath relation thereunto. For as for the *Natural Magic* whereof now there is mention in Books, containing certain credulous and ſuperſtitious Conceits and Obſervations of *Sympathies* and *Antipathies*, and *hidden Proprieties*, and ſome frivolous experiments, ſtrange rather by diſguiſement than in themſelves, it is as far differing in truth of Nature from ſuch a knowledge as we require, as the Story of King *Arthur* of *Britain*, or *Hugh* of *Bourdeaux*, differs from *Cæſar's* Commentaries in truth of Story. For it is manifeſt that *Cæſar* did greater things *de vero* than thoſe *Imaginary Heroes* were feigned to do; but he did them not in that fabulous manner. Of this kind of Learning the Fable of *Ixion* was a figure, who deſigned to enjoy *Juno*, the Goddeſs of power; and inſtead of her had Copulation with a Cloud, of which mixture were begotten Centaurs and Chimeras.

So whoſoever ſhall entertain high and vaporous imaginations, inſtead of a laborious and ſober inquiry of truth, ſhall beget hopes and beliefs of ſtrange and impoſſible ſhapes. And therefore we may note in theſe Sciences which hold ſo much of

imagination and belief, as this degenerate Natural Magic, Alchemy, Aſtrology, and the like, that in their propoſitions the deſcription of the mean is ever more monſtrous than the pretence or end. For it is a thing more probable, that he that knoweth well the Natures of *Weight*, of *Colour*, of *Pliant* and *Fragile*, in reſpect of the Hammer, of *volatile* and *fixed* in reſpect of the fire and the reſt, may ſuperinduce upon ſome Metal the nature and form of Gold by ſuch *Mechanique* as belongeth to the production of the Natures afore rehearſed, than that ſome grains of the Medicine projected ſhould in a few Moments of time turn a Sea of Quick-ſilver or other Material into Gold: ſo it is more probable that he that knoweth the Nature of *Arefaction*, the Nature of *Aſſimilation* of nouriſhment to the thing nouriſhed, the manner of *increaſe* and *clearing of ſpirits*, the manner of the *depredations which Spirits make upon the humours and ſolid parts*, ſhall by Ambages of diets, bathings, anointings, medicines, motions, and the like, prolong life, or reſtore ſome degree of youth or vivacity, than that it can be done with the uſe of a few drops or ſcruples of a liquor or receipt. To conclude, therefore, the true *Natural Magic*, which is that great liberty and latitude of operation which dependeth upon the knowledge of *forms*, I may report deficient, as the Relative thereof is.

To which part, if we be ſerious, and incline not to vanities and plauſible Diſcourſe, beſides the deriving and deducing the Operations themſelves

from *Metaphyſique*, there are pertinent two points of much purpoſe, the one by way of preparation, the other by way of caution: the firſt is, that there be made a *Calendar*, *reſembling an Inventory* of the eſtate of man, containing all the inventions, being the works or fruits of Nature or Art, which are now extant, and whereof man is already poſſeſſed; out of which doth naturally reſult a Note, what things are yet held impoſſible, or not invented: which *Calendar* will be the more artificial and ſerviceable, if to every *reputed impoſſibility* you add what thing is extant which cometh the neareſt in degree to that *Impoſſibility;* to the end that by theſe *Optatives* and *Potentials* Man's inquiry may be the more awake in deducing direction of works from the ſpeculation of cauſes: and ſecondly, that thoſe *experiments* be not only eſteemed which have an immediate and preſent uſe, but thoſe principally which are of moſt Univerſal conſequence for invention of other experiments, and thoſe which give moſt light to the Invention of cauſes; for the Invention of the Mariner's Needle, which giveth the direction, is of no leſs benefit for Navigation than the invention of the Sails which give the Motion.

Thus have I paſſed through *Natural Philoſophy*, and the deficiences thereof; wherein if I have differed from the ancient and received Doctrines, and thereby ſhall move contradiction,—for my part, as I affect not to diſſent, ſo I purpoſe not to contend. If it be Truth,

Non canimus ſurdis, reſpondent omnia ſylvæ:

The Voice of Nature will conſent, whether the voice of man do or not. And as *Alexander Borgia* was wont to ſay of the expedition of the *French* for *Naples*, that they came with Chalk in their hands to mark up their lodgings, and not with weapons to fight; ſo I like better that entry of truth which cometh peaceably, with Chalk to mark up thoſe Minds which are capable to lodge and harbour it, than that which cometh with pugnacity and contention.

But there remaineth a diviſion of Natural Philoſophy according to the *Report of the inquiry*, and nothing concerning the Matter or ſubject: and that is *Poſitive* and *Conſiderative;* when the inquiry reporteth either an *Aſſertion* or a *Doubt*. Theſe *doubts* or *Non Liquets* are of two ſorts, *Particular* and *Total*. For the firſt, we ſee a good example thereof in *Ariſtotle's* Problems, which deſerved to have had a better continuance; but ſo nevertheleſs as there is one point whereof warning is to be given and taken. The Regiſtering of doubts hath two excellent uſes: the one, that it ſaveth Philoſophy from errors and falſehoods; when that which is not fully appearing is not collected into aſſertion, whereby error might draw error, but is reſerved in doubt: the other, that the entry of doubts is as ſo many ſuckers or ſponges to draw uſe of Knowledge; inſomuch as that which, if doubts had not preceded, a man ſhould never have adviſed, but paſſed it over without Note, is, by the ſuggeſtion

and ſolicitation of doubts, made to be attended and applied. But both theſe commodities do ſcarcely countervail an inconvenience which will intrude itſelf, if it be not debarred; which is, that when a doubt is once received, men labour rather how to keep it a doubt ſtill, than how to ſolve it; and accordingly bend their Wits. Of this we ſee the familiar example in Lawyers and Scholars, both which, if they have once admitted a doubt, it goeth ever after Authorized for a doubt. But that uſe of Wit and Knowledge is to be allowed, which laboureth to make doubtful things certain, and not thoſe which labour to make certain things doubtful. Therefore theſe *Calendars of doubts* I commend as excellent things; ſo that there be this caution uſed, that when they be thoroughly ſifted and brought to reſolution, they be from thenceforth omitted, diſcarded, and not continued to cheriſh and encourage men in doubting. To which *Calendar* of doubts or Problems, I adviſe be annexed another *Calendar*, as much or more Material, which is a *Calendar of Popular Errors:* I mean chiefly in natural Hiſtory, ſuch as paſs in ſpeech and conceit, and are nevertheleſs apparently detected and convicted of untruth; that Man's knowledge be not weakened nor imbaſed by ſuch droſs and vanity. As for the *Doubts or Non liquets general, or in Total*, I underſtand thoſe differences of opinions touching the principles of Nature, and the fundamental points of the ſame, which have cauſed the diverſity of Sects, Schools, and Philoſophies, as that

of *Empedocles*, *Pythagoras*, *Democritus*, *Parmenides*, and the reſt. For although *Ariſtotle*, as though he had been of the Race of the *Ottomans*, thought he could not Reign except the firſt thing he did he killed all his Brethren; yet to thoſe that ſeek *Truth* and not *Magiſtrality*, it cannot but ſeem a Matter of great profit, to ſee before them the ſeveral opinions touching the foundations of Nature; not for any exact Truth that can be expected in thoſe Theories; for as the ſame *Phænomena* in Aſtronomy are ſatisfied by the received Aſtronomy of the diurnal Motion, and the proper Motions of the Planets, with their *Eccentrics* and *Epicycles*, and likewiſe by the Theory of *Copernicus* who ſuppoſed the Earth to move, (and the Calculations are indifferently agreeable to both,) ſo the ordinary face and view of experience is many times ſatisfied by ſeveral Theories and Philoſophies; whereas to find the real truth requireth another manner of ſeverity and attention. For as *Ariſtotle* ſaith, that children at the firſt will call every woman mother, but afterward they come to diſtinguiſh according to truth, ſo Experience, if it be in childhood, will call *every Philoſophy Mother*, but when it cometh to ripeneſs, it will diſcern the true Mother. So, as in the mean time it is good to ſee the Several Gloſſes and Opinions upon Nature, whereof, it may be, every one in ſome one point hath ſeen clearer than his fellows, therefore, I wiſh ſome collection to be made, painfully and underſtandingly, *de Antiquis Philoſophiis*, out of all the poſ-

ſible light which remaineth to us of them: which kind of work I find deficient. But here I muſt give warning, that it be done diſtinctly and ſeverally; the Philoſophies of every one throughout by themſelves, and not by titles packed and fagotted up together, as hath been done by *Plutarch*. For it is the harmony of a Philoſophy in itſelf which giveth it light and credence; whereas if it be ſingled and broken, it will ſeem more foreign and diſſonant. For as when I read in *Tacitus* the Actions of *Nero*, or *Claudius*, with circumſtances of times, inducements, and occaſions, I find them not ſo ſtrange; but when I read them in *Suetonius Tranquillus*, gathered into titles and bundles, and not in order of time, they ſeem more monſtrous and incredible: ſo is it of any Philoſophy reported entire, and diſmembered by Articles. Neither do I exclude opinions of latter times to be likewiſe repreſented in this Calendar of Sects of Philoſophy, as that of *Theophraſtus Paracelſus*, eloquently reduced into a harmony by the Pen of *Severinus* the *Dane;* and that of *Tileſius*, and his Scholar *Donius*, being as a Paſtoral Philoſophy, full of ſenſe, but of no great depth; and that of *Fracaſtorius*, who, though he pretended not to make any new Philoſophy, yet did uſe the abſoluteneſs of his own ſenſe upon the old; and that of *Gilbertus* our countryman, who revived, with ſome alterations and demonſtrations, the opinions of *Xenophanes:* and any other worthy to be admitted.

Thus have we now dealt with two of the three

beams of Man's knowledge; that is *Radius directus*, which is referred to Nature, *Radius Refractus*, which is referred to GOD; and cannot report truly becauſe of the inequality of the *Medium:* there reſteth *Radius Reflexus*, whereby Man beholdeth and contemplateth himſelf.

We come therefore now to that knowledge whereunto the ancient Oracle directeth us, which is *the knowledge of ourſelves;* which deſerveth the more accurate handling, by how much it toucheth us more nearly. This knowledge, as it is the end and Term of Natural Philoſophy *in the intention of Man*, ſo notwithſtanding, it is but a portion of Natural Philoſophy *in the continent of Nature:* and generally let this be a Rule, that all partitions of knowledges be accepted rather for *lines and veins*, than for *ſections and ſeparations;* and that the continuance and entireneſs of knowledge be preſerved. For the contrary hereof hath made particular Sciences to become barren, ſhallow, and erroneous, while they have not been Nouriſhed and Maintained from the common fountain. So we ſee *Cicero* the Orator complained of *Socrates* and his School, that he was the firſt that ſeparated Philoſophy and Rhetoric; whereupon Rhetoric became an empty and verbal Art. So we may ſee that the opinion of *Copernicus* touching the rotation of the earth, which Aſtronomy itſelf cannot correct, becauſe it is not repugnant to any of the *Phænomena*, yet Natural Philoſophy may correct. So we ſee alſo that the Science of *Medicine*, if it be deſtituted

and forſaken by *Natural Philoſophy*, it is not much better than an Empirical practice. With this reſervation therefore we proceed to *Human Philoſophy* or *Humanity*, which hath two parts: the one conſidereth Man *ſegregate or diſtributively;* the other *congregate*, or *in ſociety*. So is *Human Philoſophy* either *Simple* and *Particular*, or conjugate and Civil. *Humanity Particular* conſiſteth of the ſame parts whereof Man conſiſteth; that is, of *Knowledges which Reſpect the Body*, and of *Knowledges that reſpect the Mind;* but before we *diſtribute* ſo far, it is good to *conſtitute*. For I do take the conſideration in general, and at large, of *Human Nature* to be fit to be emancipate and made a knowledge by itſelf: not ſo much in regard of thoſe delightful and elegant diſcourſes which have been made of the dignity of Man, of his miſeries, of his ſtate and life, and the like *Adjuncts of his common and undivided Nature;* but chiefly in regard of the knowledge concerning the *ſympathies and concordances between the mind and body*, which being mixed cannot be properly aſſigned to the ſciences of either.

This knowledge hath two branches: for as all leagues and Amities conſiſt of mutual *Intelligence* and mutual *Offices*, ſo this league of mind and body hath theſe two parts; *how the one diſcloſeth the other, and how the one worketh upon the other; Diſcovery*, and *Impreſſion*. The former of theſe hath begotten two Arts, both of *Prediction* or *Prenotion;* whereof the one is honoured with the in-

quiry of *Ariſtotle*, and the other of *Hippocrates*. And although they have of later time been uſed to be coupled with ſuperſtitious and fantaſtical arts, yet being purged and reſtored to their true ſtate, they have both of them a ſolid ground in nature, and a profitable uſe in life. The firſt is *Phyſiognomy*, which diſcovereth the diſpoſition of the mind by the Lineaments of the body: the ſecond is the *Expoſition of Natural Dreams*, which diſcovereth the ſtate of the body by the imaginations of the mind. In the former of theſe I note a deficience. For *Ariſtotle* hath very ingeniouſly and diligently handled thefactures of the body, but not the geſtures of the body, which are no leſs comprehenſible by art, and of greater uſe and advantage. For the Lineaments of the body do diſcloſe the diſpoſition and inclination of the mind in general; but the Motions of the countenance and parts do not only ſo, but do further diſcloſe the preſent humour and ſtate of the mind and will. For as your Majeſty ſaith moſt aptly and elegantly, *As the Tongue ſpeaketh to the Ear, ſo the geſture ſpeaketh to the Eye.* And therefore a number of ſubtle perſons, whoſe eyes do dwell upon the faces and faſhions of men, do well know the advantage of this obſervation, as being moſt part of their ability; neither can it be denied, but that it is a great diſcovery of diſſimulations, and a great direction in buſineſs.

The latter Branch, touching *Impreſſion*, hath not been collected into Art, but hath been handled diſperſedly; and it hath the ſame relation or *Anti-*

ſtrophe that the former hath. For the conſideration is double: *Either how, and how far the humours and affects of the body do alter or work upon the mind;* or again, *how and how far the paſſions or Apprehenſions of the mind do alter or work upon the Body.* The former of theſe hath been inquired and conſidered as a part and appendix of Medicine, but much more as a part of Religion or ſuperſtition. For the Phyſician preſcribeth Cures of the mind in Phrenſies and melancholy paſſions; and pretendeth alſo to exhibit Medicines to exhilarate the mind, to confirm the courage, to clarify the wits, to corroborate the memory, and the like: but the ſcruples and ſuperſtitions of Diet and other Regimen of the body in the ſect of the *Pythagoreans*, in the Hereſy of the *Manicheans*, and in the Law of *Mahomet*, do exceed. So likewiſe the ordinances in the Ceremonial Law, interdicting the eating of the blood and fat, diſtinguiſhing between beaſts clean and unclean for meat, are many and ſtrict. Nay the faith itſelf being clear and ſerene from all clouds of Ceremony, yet retaineth the uſe of faſtings, abſtinences, and other Macerations and humiliations of the body, as things real, and not figurative. The root and life of all which preſcripts is, beſides the Ceremony, the conſideration of that dependency which the affections of the mind are ſubmitted unto upon the ſtate and diſpoſition of the body. And if any man of weak judgment do conceive that this ſuffering of the mind from the body doth either queſtion the Immortality, or

derogate from the ſovereignty of the ſoul, he may be taught in eaſy inſtances, that the Infant in the mother's womb is compatible with the mother and yet ſeparable; the moſt abſolute Monarch is ſometimes led by his ſervants and yet without ſubjection. As for the reciprocal knowledge, which is the operation of the conceits and paſſions of the mind upon the body, we ſee all wiſe Phyſicians, in the preſcriptions of their regimens to their Patients, do ever conſider *Accidentia animi* as of great force to further or hinder remedies or recoveries: and more eſpecially it is an inquiry of great depth and worth concerning *Imagination*, how and how far it altereth the body proper of the Imaginant. For although it hath a manifeſt power to hurt, it followeth not it hath the ſame degree of power to help; no more than a man can conclude, that becauſe there be peſtilent Airs, able ſuddenly to kill a man in health, therefore there ſhould be ſovereign airs, able ſuddenly to cure a man in ſickneſs. But the inquiſition of this part is of great uſe, though it needeth, as *Socrates* ſaid, *a Delian diver*, being difficult and profound. But unto all this knowledge *De Communi vinculo*, of the Concordances between the Mind and the body, that part of Inquiry is moſt neceſſary, which conſidereth of the *Seats* and *Domiciles* which the ſeveral faculties of the mind do take and occupate in the organs of the body; which knowledge hath been attempted, and is controverted, and deſerveth to be much better inquired. For the opinion of *Plato*, who placed

the Underſtanding in the Brain, *Animoſity* (which he did unfitly call *Anger*, having a greater mixture with *Pride*) *in the Heart*, and *Concupiſcence* or *Senſuality in the Liver*, deſerveth not to be deſpiſed; but much leſs to be allowed. So then we have conſtituted, as in our own wiſh and advice, the inquiry *Touching human nature entire*, as a juſt portion of knowledge to be handled apart.

The knowledge that concerneth man's body is divided as the good of man's body is divided, unto which it referreth. The good of man's body is of four kinds, *Health*, *Beauty*, *Strength*, and *Pleaſure:* ſo the knowledges are *Medicine*, *or Art of Cure: Art of Decoration*, which is called *Coſmetique*; *Art of Activity*, which is called *Athletique*; and *Art Voluptuary*, which *Tacitus* truly calleth *Eruditus Luxus*. This Subject of man's body is of all other things in Nature moſt ſuſceptible of remedy; but then that Remedy is moſt ſuſceptible of error. For the ſame Subtilty of the ſubject doth cauſe large poſſibility and eaſy failing; and therefore the inquiry ought to be the more exact.

To ſpeak therefore of *Medicine*, and to reſume that we have ſaid, aſcending a little higher: the ancient opinion that *Man* was *Microcoſmus*, an Abſtract or Model of the world, hath been fantaſtically ſtrained by *Paracelſus* and the Alchemiſts, as if there were to be found in *man's body* certain correſpondences and parallels, which ſhould have reſpect to all varieties of things, as ſtars, planets, minerals, which are extant in the great world.

But thus much is evidently true, that of all ſubſtances which Nature hath produced, man's body is the moſt extremely compounded: for we ſee herbs and plants are nouriſhed by earth and water; Beaſts for the moſt part by herbs and fruits; Man by the fleſh of Beaſts, Birds, Fiſhes, Herbs, Grains, Fruits, Water, and the manifold alterations, dreſſings, and preparations of the ſeveral bodies, before they come to be his food and aliment. Add hereunto, that Beaſts have a more ſimple order of life, and leſs change of Affections to work upon their bodies: whereas man in his Manſion, ſleep, exerciſe, paſſions, hath infinite variations: and it cannot be denied but that the *body of Man* of all other things is of the moſt compounded Maſs. *The ſoul* on the other ſide is the ſimpleſt of ſubſtances, as is well expreſſed:

Purumque reliquit
Æthereum ſenſum atque Auraï ſimplicis ignem.

So that it is no marvel though *the ſoul* ſo placed enjoy no reſt, if that principle be true, that *Motus rerum eſt rapidus extra locum, Placidus in loco.* But to the purpoſe: this variable compoſition of man's body hath made it as an Inſtrument eaſy to diſtemper; and therefore the Poets did well to conjoin *Muſic* and *Medicine* in *Apollo:* becauſe the Office of Medicine is but to tune this curious Harp of man's body and to reduce it to Harmony. So then the *Subject* being ſo *Variable*, hath made the *Art* by conſequence more *Conjectural;* and the Art being Conjectural hath made ſo much the more

place to be left for impoſture. For almoſt all other Arts and Sciences are judged by Acts, or Maſterpieces, as I may term them, and not by the ſucceſſes and events. The Lawyer is judged by the virtue of his pleading, and not by the iſſue of the cauſe. The Maſter of the Ship is judged by the directing his courſe aright, and not by the fortune of the Voyage. But the Phyſician, and perhaps the Politician, hath no particular Acts demonſtrative of his ability, but is judged moſt by the event; which is ever but as it is taken: for who can tell, if a Patient die or recover, or if a State be preſerved or ruined, whether it be Art or Accident? And therefore many times the Impoſtor is prized, and the man of virtue taxed. Nay, we ſee the weakneſs and credulity of men is ſuch, as they will often prefer a Mountebank or Witch before a learned Phyſician. And therefore the Poets were clear-ſighted in diſcerning this extreme folly, when they made *Æſculapius* and *Circe* Brother and Siſter, both Children of the Sun, as in the verſes, Æn. vii. 772:

> *Ipſe repertorem medicinæ talis et artis*
> *Fulmine* Phœbigenam *Stygias detruſit ad undas:*

And again, Æn. vii. 11:

> *Dives inacceſſos ubi* Solis filia *Lucos*, &c.

For in all times, in the opinion of the multitude, Witches and old women and Impoſtors have had a Competition with Phyſicians. And what followeth? Even this, that Phyſicians ſay to them-

ſelves, as *Solomon* expreſſeth it upon a higher occaſion; *If it befall to me as befalleth to the fools, why ſhould I labour to be more wiſe?*" And therefore I cannot much blame Phyſicians, that they uſe commonly to intend ſome other Art or practice, which they fancy more than their profeſſion. For you ſhall have of them Antiquaries, Poets, Humaniſts, Stateſmen, Merchants, Divines, and in every of theſe better ſeen than in their profeſſion; and no doubt upon this ground, that they find that mediocrity and excellency in their Art maketh no difference in profit or reputation towards their fortune; for the weakneſs of Patients, and ſweetneſs of life, and nature of hope, maketh men depend upon Phyſicians with all their defects. But nevertheleſs, theſe things which we have ſpoken of, are courſes begotten between a little occaſion, and a great deal of ſloth and default; for if we will excite and awake our obſervation, we ſhall ſee in familiar inſtances what a predominant faculty *the Subtilty* of *Spirit* hath over the *Variety* of *Matter* or *Form*. Nothing more variable than faces and countenances: yet men can bear in memory the infinite diſtinctions of them; nay, a Painter with a few ſhells of colours, and the benefit of his Eye, and habit of his imagination, can imitate them all that ever have been, are, or may be, if they were brought before him. Nothing more variable than voices; yet men can likewiſe diſcern them perſonally: nay, you ſhall have a *Buffoon* or *Pantomimus*, who will expreſs as many as he pleaſeth. Nothing

more variable than the differing ſounds of words; yet men have found the way to reduce them to a few ſimple Letters. So that it is not the *inſufficiency or incapacity of man's mind*, but it is the *remote ſtanding or placing thereof*, that breedeth theſe Mazes and incomprehenſions: for as the ſenſe afar off is full of miſtaking, but is exact at hand, ſo is it of the underſtanding; the remedy whereof is, not to quicken or ſtrengthen the Organ, but to go nearer to the object; and therefore there is no doubt but if the Phyſicians will learn and uſe the true approaches and *Avenues* of Nature, they may aſſume as much as the Poet ſaith:

Et quoniam variant Morbi, variabimus artes;
Mille Mali ſpecies, mille Salutis erunt.

Which that they ſhould do, the nobleneſs of their Art doth deſerve; well ſhadowed by the Poets, in that they made *Æſculapius* to be the ſon of the Sun, the one being the fountain of life, the other as the ſecond ſtream: but infinitely more honoured by the example of our Saviour, who made the body of man the object of his miracles, as the ſoul was the object of his Doctrine. For we read not that ever he vouchſafed to do any miracle about honour or money, except that one for giving Tribute to *Cæſar;* but only about the preſerving, ſuſtaining, and healing the body of man.

Medicine is a Science which hath been, as we have ſaid, more profeſſed than laboured, and yet more laboured than advanced; the labour having been, in my judgment, rather in circle than in pro-

greſſion. For I find much Iteration, but ſmall addition. It conſidereth *cauſes of Diſeaſes*, *with the occaſions or impulſions*; the *Diſeaſes themſelves*, with the *Accidents*; and the *Cures*, with the *Preſervations*. The Deficiences which I think good to note, being a few of many, and thoſe ſuch as are of a more open and manifeſt nature, I will enumerate, and not place.

The firſt is the diſcontinuance of the ancient and ſerious diligence of *Hippocrates*, which uſed to ſet down a Narrative of the ſpecial caſes of his patients, and how they proceeded, and how they were judged by recovery or death. Therefore having an example proper in the father of the art, I ſhall not need to allege an example foreign, of the wiſdom of the Lawyers, who are careful to report new caſes and deciſions, for the direction of future judgments. This continuance of *Medicinal Hiſtory* I find deficient; which I underſtand neither to be ſo infinite as to extend to every *Common Caſe*, nor ſo reſerved as to admit none but *Wonders*: for many things are new in the *Manner*, which are not new in the *Kind*; and if men will intend to obſerve, they ſhall find much worthy to obſerve.

In the inquiry which is made by *Anatomy*, I find much deficience: for they inquire of the *Parts*, and their *Subſtances*, *Figures*, and *Collocations*; but they inquire not of the *Diverſities of the Parts*, the *Secrecies of the Paſſages*, and the *Seats or Neſtlings of the Humours*, nor much of the *Footſteps and impreſſions of Diſeaſes*: the reaſon of which

omiſſion I ſuppoſe to be, becauſe the firſt inquiry may be ſatisfied in the view of one or a few Anatomies: but the latter, being comparative and caſual, muſt ariſe from the view of many. And as to the diverſity of parts, there is no doubt but the facture or framing of the inward parts is as full of difference as the outward, and in that is the *Cauſe Continent* of many diſeaſes; which not being obſerved, they quarrel many times with the humours, which are not in fault; the fault being in the very frame and Mechanic of the part, which cannot be removed by medicine alterative, but muſt be accommodate and palliate by diets and medicines familiar. As for the paſſages and pores, it is true which was anciently noted, that the more ſubtle of them appear not in anatomies, becauſe they are ſhut and latent in dead bodies, though they be open and manifeſt in live: which being ſuppoſed, though the inhumanity of *Anatomia vivorum* was by *Celſus* juſtly reproved; yet in regard of the great uſe of this obſervation, the inquiry needed not by him ſo ſlightly to have been relinquiſhed altogether, or referred to the caſual practices of Surgery; but might have been well diverted upon the diſſection of beaſts alive, which notwithſtanding the diſſimilitude of their parts, may ſufficiently ſatisfy this inquiry. And for the humours, they are commonly paſſed over in Anatomies as purgaments; whereas it is moſt neceſſary to obſerve, what cavities, neſts, and receptacles the humours do find in the parts, with the differing kind of the humour ſo lodged

and received. And as for the footſteps of diſeaſes, and their devaſtations of the inward parts, impoſthumations, exulcerations, diſcontinuations, putrefactions, conſumptions, contractions, extenſions, convulſions, diſlocations, obſtructions, repletions, together with all preternatural ſubſtances, as ſtones, carnoſities, excreſcences, worms, and the like; they ought to have been exactly obſerved by multitude of Anatomies, and the contribution of men's ſeveral experiences, and carefully ſet down, both hiſtorically, according to the appearances, and artificially, with a reference to the diſeaſes and ſymptoms which reſult from them, in caſe where the Anatomy is of a defunct patient; whereas now, upon opening of bodies, they are paſſed over ſlightly and in ſilence.

In the inquiry of diſeaſes, they do abandon the cures of many, ſome as in their nature incurable, and others as paſt the period of cure; ſo that *Sylla* and the *Triumvirs* never proſcribed ſo many men to die, as they do by their ignorant edicts: whereof numbers do eſcape with leſs difficulty than they did in the *Roman* proſcriptions. Therefore I will not doubt to note as a deficience, that they inquire not the perfect cures of many diſeaſes, or extremities of diſeaſes; but pronouncing them incurable, do enact a law of neglect, and exempt ignorance from diſcredit.

Nay further, I eſteem it the office of a Phyſician not only to reſtore health, but to mitigate pain and dolours; and not only when ſuch mitigation

may conduce to recovery, but when it may ſerve to make a fair and eaſy paſſage: for it is no ſmall felicity which *Auguſtus Cæſar* was wont to wiſh to himſelf, that ſame *Euthanaſia;* and which was ſpecially noted in the death of *Antoninus Pius*, whoſe death was after the faſhion and ſemblance of a kindly and pleaſant ſleep. So it is written of *Epicurus*, that after his diſeaſe was judged deſperate, he drowned his ſtomach and ſenſes with a large draught and ingurgitation of wine! whereupon the Epigram was made, *Hinc Stygias Ebrius hauſit aquas;* he was not ſober enough to taſte any bitterneſs of the Stygian water. But the Phyſicians, contrariwiſe, do make a kind of ſcruple and Religion to ſtay with the patient after the diſeaſe is deplored; whereas, in my judgment, they ought both to inquire the ſkill, and to give the attendances, for the facilitating and aſſuaging of the pains and agonies of death.

In the conſideration of the Cures of diſeaſes, I find a deficience in the Receipts of propriety, reſpecting the particular cures of diſeaſes: for the Phyſicians have fruſtrated the fruit of tradition and experience by their magiſtralities, in adding, and taking out, and changing *Quid pro quo*, in their receipts, at their pleaſures; commanding ſo over the medicine, as the medicine cannot command over the diſeaſes: for except it be Treacle and Mithridatum, and of late *Diaſcordium*, and a few more, they tie themſelves to no receipts ſeverely and religiouſly: for as to the confections of ſale which

are in the ſhops, they are for readineſs, and not for propriety; for they are upon general intention of purging, opening, comforting, altering, and not much appropriate to particular Diſeaſes: and this is the cauſe why Empirics and old women are more happy many times in their Cures than learned Phyſicians, becauſe they are more religious in holding their Medicines. Therefore here is the deficience which I find, that Phyſicians have not, partly out of their own practice, partly out of the conſtant probations reported in books, and partly out of the traditions of Empirics, ſet down and delivered over certain *Experimental Medicines* for the Cure of particular Diſeaſes, beſides their own *Conjectural* and *Magiſtral deſcriptions*. For as they were the men of the beſt Compoſition in the State of *Rome*, which either being Conſuls inclined to the people, or being Tribunes inclined to the Senate; ſo in the matter we now handle, they be the beſt Phyſicians, which being learned incline to the traditions of experience, or being Empirics incline to the methods of learning.

In preparation of Medicines, I do find ſtrange, eſpecially conſidering how mineral Medicines have been extolled, and that they are ſafer for the outward than inward parts, that no man hath ſought to make an Imitation by Art of Natural Baths and Medicinable fountains; which nevertheleſs are confeſſed to receive their virtues from minerals: and not ſo only, but diſcerned and diſtinguiſhed from what particular Mineral they receive Tinc-

ture, as Sulphur, Vitriol, Steel, or the like; which Nature, if it may be reduced to compoſitions of art, both the variety of them will be increaſed, and the temper of them will be more commended.

But leſt I grow to be more particular than is agreeable either to my intention or to proportion, I will conclude this part with the note of one deficience more, which ſeemeth to me of greateſt conſequence; which is, that the preſcripts in uſe are too compendious to attain their end: for, to my underſtanding, it is a vain and flattering opinion to think any Medicine can be ſo ſovereign or ſo happy, as that the Receipt or uſe of it can work any great effect upon the body of man. It were a ſtrange ſpeech, which, ſpoken, or ſpoken oft, ſhould reclaim a man from a vice to which he were by nature ſubject: it is order, purſuit, ſequence, and interchange of application, which is mighty in nature; which, although it require more exact knowledge in preſcribing, and more preciſe obedience in obſerving, yet is recompenſed with the magnitude of effects. And although a man would think, by the daily viſitations of the Phyſicians, that there were a purſuance in the cure: yet let a man look into their preſcripts and miniſtrations, and he ſhall find them but inconſtancies and every day's devices, without any ſettled providence or project. Not that every ſcrupulous or ſuperſtitious preſcript is effectual, no more than every ſtraight way is the way to heaven; but the *truth of the direction* muſt precede *ſeverity of obſervance*.

For *Cosmetique*, it hath parts Civil, and parts Effeminate: for cleanness of body was ever esteemed to proceed from a due reverence to God, to society, and to ourselves. As for artificial decoration, it is well worthy of the deficiences which it hath; being neither fine enough to deceive, nor handsome to use, nor wholesome to please.

For *Athletique*, I take the subject of it largely, that is to say, for any point of Ability whereunto the body of man may be brought, whether it be of *Activity*, or of *Patience;* whereof *Activity* hath two parts, *Strength* and *Swiftness;* and *Patience* likewise hath two parts, *Hardness against wants and Extremities*, and *Indurance of pain or torment;* whereof we see the practices in Tumblers, in Savages, and in those that suffer punishment: nay, if there be any other faculty which falls not within any of the former divisions, as in those that dive, that obtain a strange power of containing respiration, and the like, I refer it to this part. Of these things the practices are known, but the Philosophy that concerneth them is not much inquired; the rather, I think, because they are supposed to be obtained, either by an aptness of Nature, which cannot be taught, or only by continual custom, which is soon prescribed: which though it be not true, yet I forbear to note any deficiences: for the Olympian Games are down long since, and the mediocrity of these things is for use; as for the excellency of them, it serveth for the most part but for mercenary ostentation.

For *Arts of pleaſure ſenſual*, the chief deficience in them is of Laws to repreſs them. For as it hath been well obſerved, that the Arts which flouriſh in times while virtue is in growth, are *Military;* and while virtue is in State, are *Liberal;* and while virtue is in declination, are *voluptuary;* ſo I doubt that this age of the world is ſomewhat upon the deſcent of the wheel. With Arts *voluptuary* I couple practices *Joculary;* for the deceiving of the ſenſes is one of the pleaſures of the ſenſes. As for Games of recreation, I hold them to belong to Civil life and education. And thus much of that particular *Human Philoſophy which concerns the Body*, which is but the Tabernacle of the mind.

For *Human Knowledge which concerns the Mind*, it hath two parts; the one that inquireth of *the ſubſtance or nature of the ſoul or mind*, the other that inquireth of the *Faculties or functions thereof.* Unto the firſt of theſe, the conſiderations of the *Original of the ſoul*, whether it be *native or adventive*, and *how far it is exempted from Laws of Matter*, and of the *Immortality thereof*, and many other points, do appertain: which have been not more laborioufly inquired than variouſly reported; ſo as the travail therein taken ſeemeth to have been rather in a Maze than in a way. But although I am of opinion that this knowledge may be more really and ſoundly inquired, even in Nature, than it hath been; yet I hold that in the end it muſt be bounded by Religion, or elſe it will be ſubject to deceit and deluſion: for as the ſubſtance of the

ſoul in the Creation was not extracted out of the Maſs of heaven and earth by the benediction of a *Producat* but was immediately inſpired from GOD: ſo it is not poſſible that it ſhould be otherwiſe than by accident, ſubject *to the Laws of Heaven and Earth*, which are *the ſubject of Philoſophy;* and therefore the true knowledge of the nature and ſtate of the ſoul muſt come by the ſame inſpiration that gave the ſubſtance. Unto this part of knowledge touching the ſoul there be two appendices; which, as they have been handled, have rather vapoured forth fables than kindled truth, *Divination* and *Faſcination*.

Divination hath been anciently and fitly divided into *Artificial and Natural;* whereof *Artificial* is, when the mind maketh a prediction by argument, concluding upon ſigns and tokens; *Natural* is, when the mind hath a preſention by an internal power, without the inducement of a ſign. *Artificial* is of two ſorts; either when the argument is coupled with a derivation of cauſes, which is *rational;* or when it is only grounded upon a Coincidence of the effect, which is *experimental:* whereof the latter for the moſt part is ſuperſtitious; ſuch as were the Heathen obſervations upon the inſpection of Sacrifices, the flights of birds, the ſwarming of Bees; and ſuch as was the *Chaldean Aſtrology*, and the like. For *Artificial Divination*, the ſeveral kinds thereof are diſtributed amongſt particular knowledges. The *Aſtronomer* hath his predictions, as of conjunctions, aſpects, Eclipſes,

and the like. The Phyſician hath his predictions of death, of recovery, of the accidents and iſſues of Diſeaſes. The Politician hath his predictions; *O urbem venalem, et cito perituram, ſi emptorem invenerit!* which ſtayed not long to be performed, in *Sylla* firſt, and after in *Cæſar*. So as theſe predictions are now impertinent, and to be referred over. But the *Divination* which ſpringeth from the internal nature of the ſoul, is that which we now ſpeak of; which hath been made to be of two ſorts, *Primitive* and by *Influxion*. Primitive is grounded upon the ſuppoſition, that the mind, when it is withdrawn and collected into itſelf, and not diffuſed into the Organs of the body, hath ſome extent and latitude of prenotion; which therefore appeareth moſt in ſleep, in extacies, and near death, and more rarely in waking apprehenſions; and is induced and furthered by thoſe abſtinences and obſervances which make the mind moſt to conſiſt in itſelf: by influxion, is grounded upon the conceit that the mind, as a mirror or glaſs, ſhould take illumination, from the foreknowledge of God and ſpirits; unto which the ſame Regimen doth likewiſe conduce. For the retiring of the mind within itſelf, is the State which is moſt ſuſceptible of divine influxions; ſave that it is accompanied in this caſe with a fervency and elevation, which the ancients noted by *fury*, and not with a repoſe and quiet, as it is in the other.

Faſcination is the power and act of Imagination, intenſive upon other bodies than the body of the

Imaginant: for of that we ſpake in the proper place: wherein the School of *Paracelſus*, and the Diſciples of pretended Natural Magic have been ſo intemperate, as they have exalted the power of the imagination to be much one with the power of *Miracle-working* faith; others, that draw nearer to Probability, calling to their view the ſecret paſſages of things, and ſpecially of the Contagion that paſſeth from body to body, do conceive it ſhould likewiſe be agreeable to Nature, that there ſhould be ſome tranſmiſſions and operations from ſpirit to ſpirit without the mediation of the ſenſes; whence the conceits have grown, now almoſt made civil, of the Maſtering Spirit, and the force of confidence, and the like. Incident unto this is the inquiry how to raiſe and fortify the imagination: for if the Imagination fortified have power, then it is material to know how to fortify and exalt it. And herein comes in crookedly and dangerouſly a palliation of a great part of *Ceremonial Magic.* For it may be pretended that *Ceremonies*, *Characters*, and *Charms*, do work, not by any *Tacit* or *Sacramental Contract* with evil ſpirits, but ſerve only to ſtrengthen the imagination of him that uſeth it; as Images are ſaid by the *Roman Church* to fix the cogitations, and raiſe the devotions of them that pray before them. But for mine own judgment, if it be admitted that Imagination hath power, and that *Ceremonies* fortify Imagination, and that they be uſed ſincerely and intentionally for that purpoſe; yet I ſhould hold them unlawful, as oppoſing to

that firſt edict which GOD gave unto man, *In ſudore vultus comedes Panem tuum.* For they propound thoſe noble effects, which GOD hath ſet forth unto man to be bought at the price of labour, to be attained by a few eaſy and ſlothful obſervances. Deficiencies in theſe knowledges I will report none, other than the general deficience, that it is not known how much of them is verity, and how much vanity.

The knowledge which reſpecteth the faculties of the mind of man is of two kinds; the one reſpecting his *underſtanding* and *Reaſon*, and the other his *will*, *appetite*, and *Affection;* whereof the former produceth *Poſition* or *Decree*, the latter *Action* or *Execution*. It is true that the *Imagination* is an *Agent* or *Nuncius*, in both provinces, both the *Judicial* and the *Miniſterial*. For *Senſe* ſendeth over to *Imagination* before *Reaſon* have judged: and *Reaſon* ſendeth over to *Imagination* before the *Decree* can be acted: for *Imagination* ever precedeth *Voluntary Motion*. Saving that this *Janus* of *Imagination* hath differing faces: for the face towards *Reaſon* hath the print of Truth, but the face towards *Action* hath the print of *Good;* which nevertheleſs are faces,

Quales decet eſſe ſororum.

Neither is the *Imagination* ſimply and only a Meſſenger; but is inveſted with, or at leaſtwiſe uſurpeth no ſmall authority in itſelf, beſides the duty of the Meſſage. For it was well ſaid by *Ariſtotle*,

That the mind hath over the Body that Commandment, which the Lord hath over a Bondman; but that Reaſon hath over the Imagination that Commandment which a Magiſtrate hath over a free Citizen; who may come alſo to rule in his turn. For we ſee that, in matters of *Faith* and *Religion*, we raiſe our *Imagination* above our *Reaſon;* which is the cauſe why *Religion* ſought ever acceſs to the *Mind* by *Similitudes*, *Types*, *Parables*, *Viſions*, *Dreams*. And again, in all perſuaſions that are wrought by eloquence, and other impreſſions of like Nature, which do paint and diſguiſe the true appearance of things, the chief recommendation unto *Reaſon* is from the *Imagination*. Nevertheleſs, becauſe I find not any Science that doth properly or fitly pertain to the *Imagination*, I ſee no cauſe to alter the former diviſion. For as for Poeſy, it is rather a pleaſure or play of imagination, than a work or duty thereof. And if it be a work, we ſpeak not now of ſuch parts of learning as the Imagination produceth, but of ſuch Sciences as handle and conſider of the *Imagination;* no more than we ſhall ſpeak now of ſuch *Knowledges* as reaſon produceth, for that extendeth to all Philoſophy, but of ſuch *Knowledges* as do handle and inquire of the faculty of *Reaſon:* ſo as *Poeſy* had its true place. As for the power of the *Imagination* in nature, and the manner of fortifying the ſame, we have mentioned it in the Doctrine *De Anima*, whereunto moſt fitly it belongeth. And laſtly, for *Imaginative* or *Inſinuative Reaſon*, which is the ſubject

of Rhetoric, we think it beſt to refer it to the *Arts of Reaſon.* So therefore we content ourſelves with the former diviſion, that Human Philoſophy, which reſpecteth the faculties of the mind of man, hath two parts, *Rational* and *Moral.*

The part of Human Philoſophy which is Rational, is of all knowledges, to the moſt wits, the leaſt delightful, and ſeemeth but a Net of ſubtilty and ſpinoſity. For as it was truly ſaid, that Knowledge is *Pabulum Animi;* ſo in the Nature of men's appetite to this food, moſt men are of the taſte and ſtomach of the *Iſraelites* in the deſert, that would fain have returned *Ad ollas carnium*, and were weary of *Manna;* which, though it were celeſtial, yet ſeemed leſs nutritive and comfortable. So generally men taſte well knowledges that are drenched in fleſh and blood, *Civil Hiſtory*, *Morality*, *Policy*, about the which men's affections, praiſes, fortunes do turn and are converſant; but this ſame *Lumen ſiccum* doth parch and offend moſt men's watery and ſoft natures. But, to ſpeak truly of things as they are in worth, *Rational Knowledges* are the keys of all other Arts; for as *Ariſtotle* ſaith aptly and elegantly, *That the hand is the Inſtrument of Inſtruments, and the mind is the Form of Forms:* ſo theſe be truly ſaid to be the Art of Arts: neither do they only direct, but likewiſe confirm and ſtrengthen: even as the habit of ſhooting doth not only enable to ſhoot a nearer ſhoot, but alſo to draw a ſtronger Bow.

The *Arts intellectual* are four in number; divided

according to the ends whereunto they are referred: for man's labour is to *invent* that which is *ſought* or *propounded:* or to *judge* that which is *invented;* or to *retain* that which is *judged;* or to *deliver* over that which is *retained.* So as the Arts muſt be four; *Art* of *Inquiry* or *Invention: Art* of *Examination* or *Judgment: Art* of *Cuſtody* or *Memory;* and *Art* of *Elocution* or *Tradition.*

Invention is of two kinds, much differing: the one of *Arts* and *Sciences;* and the other of *Speech* and *Arguments.* The former of theſe I do report deficient; which ſeemeth to me to be ſuch a defi-cience as if, in the making of an Inventory touch-ing the Eſtate of a defunct, it ſhould be ſet down, *that there is no ready money.* For as money will fetch all other commodities, ſo this knowledge is that which ſhould purchaſe all the reſt. And like as the *Weſt Indies* had never been diſcovered if the uſe of the Mariner's Needle had not been firſt diſcovered, though the one be vaſt Regions, and the other a ſmall Motion; ſo it cannot be found ſtrange if Sciences be no farther diſcovered, if the Art itſelf of *Invention* and *Diſcovery* hath been paſſed over.

That this part of Knowledge is wanting, to my Judgment ſtandeth plainly confeſſed; for firſt, *Logic* doth not pretend to invent *Sciences*, or the *Axioms* of *Sciences*, but paſſeth it over with a *Cuique in ſua arte credendum.* And *Celſus* acknowledgeth it gravely, ſpeaking of the Empirical and Dogmatical Sects of Phyſicians, *That Medicines and Cures*

were firſt found out, and then after the Reaſons and cauſes were diſcourſed; and not the Cauſes firſt found out, and by light from them the Medicines and Cures diſcovered. And *Plato*, in his *Theætetus*, noteth well, *That particulars are infinite, and the higher generalities give no ſufficient direction; and that the pith of all Sciences, which maketh the Artſman differ from the inexpert, is in the middle propoſitions, which in every particular knowledge are taken from Tradition and Experience.*" And therefore we ſee, that they which diſcourſe of the Inventions and Originals of things, refer them rather to *Chance* than to *Art*, and rather to *Beaſts*, *Birds*, *Fiſhes*, *Serpents*, than to *Men*.

Dictamnum genetrix Cretæa carpit ab Ida,
Puberibus caulem foliis et flore comantem
Purpureo: non illa feris incognita Capris
Gramina, cum tergo volucres hæſere ſagittæ.

So that it was no marvel, the manner of *Antiquity* being to conſecrate Inventors, that the *Ægyptians* had ſo few human Idols in their Temples, but almoſt all Brute.

Omnigenumque Deum monſtra, et latrator Anubis,
Contra Neptunum, et Venerem, contraque Minervam, &c.

And if you like better the tradition of the *Grecians*, and aſcribe the firſt Inventions to Men; yet you will rather believe that *Prometheus* firſt ſtruck the flints, and marvelled at the ſpark, than that when he firſt ſtruck the flints he expected the ſpark: and therefore we ſee the *Weſt Indian Prometheus* had no intelligence with the *European*, becauſe of

the rareneſs with them of flint, that gave the firſt occaſion. So as it ſhould ſeem, that hitherto men are rather beholden to a wild Goat for Surgery, or to a Nightingale for Muſic, or to the *Ibis* for ſome part of Phyſic, or to the Pot lid that flew open for Artillery, or generally to *Chance*, or any thing elſe, than to *Logic*, for the Invention of Arts and Sciences. Neither is the form of Invention which *Virgil* deſcribeth much other :

> *Ut varias uſus meditando extunderet artes*
> *Paulatim.*

For if you obſerve the words well, it is no other method than that which brute Beaſts are capable of, and do put in uſe; which is *a perpetual intending or practiſing ſome one thing, urged and impoſed by an abſolute neceſſity of conſervation of being :* for ſo *Cicero* ſaith very truly, *Uſus uni rei deditus et Naturam et Artem ſæpe vincit.* And therefore if it be ſaid of Men,

> *Labor omnia vincit*
> *Improbus, et duris urgens in rebus egeſtas!*

it is likewiſe ſaid of beaſts, *Quis Pſittaco docuit ſuum χαῖρε?*" Who taught the Raven in a drought to throw pebbles into a hollow tree, where ſhe eſpied water, that the water might riſe ſo as ſhe might come to it? Who taught the Bee to ſail through ſuch a vaſt Sea of air, and to find the way from a field in flower, a great way off, to her Hive? Who taught the Ant to bite every grain of Corn that ſhe burieth in her hill, leſt it ſhould take root and

grow? Add then the word *Extundere*, which importeth the extreme difficulty, and the word *Paulatim*, which importeth the extreme ſlowneſs, and we are where we were, even amongſt the *Ægyptians' Gods;* there being little left to the faculty of *Reaſon*, and nothing to the duty of *Art*, for matter of *Invention*.

Secondly, the Induction which the *Logicians* ſpeak of, and which ſeemeth familiar with *Plato*, (whereby the *Principles* of *Sciences* may be pretended to be invented, and ſo the middle propoſitions by derivation from the Principles;) their form of Induction, I ſay, is utterly vicious and incompetent: wherein their error is the fouler, becauſe it is the duty of *Art* to perfect and exalt Nature; but they contrariwiſe have wronged, abuſed, and traduced Nature. For he that ſhall attentively obſerve how the mind doth gather this excellent dew of Knowledge, like unto that which the Poet ſpeaketh of, *Aërei mellis cœleſtia dona*, diſtilling and contriving it out of particulars natural and artificial, as the flowers of the field and Garden, ſhall find that the mind of herſelf by Nature doth manage and Act an Induction much better than they deſcribe it. For to conclude *upon an Enumeration of particulars, without inſtance contradictory*, is no concluſion, but a conjecture; for who can aſſure, in many ſubjects, upon thoſe particulars which appear of a ſide, that there are not other on the contrary ſide which appear not? As if *Samuel* ſhould have reſted upon thoſe Sons of

Jeſſe which were brought before him, and failed of *David*, which was in the field. And this form, to ſay truth, is ſo groſs, as it had not been poſſible for wits ſo ſubtile as have managed theſe things to have offered it to the world, but that they haſted to their *Theories* and *Dogmaticals*, and were imperious and ſcornful toward particulars; which their manner was to uſe but as *Lictores* and *Viatores*, for Sarjeants and Whifflers, *Ad ſummovendam turbam*, to make way and make room for their opinions, rather than in their true uſe and ſervice. Certainly it is a thing may touch a man with a religious wonder, to ſee how the footſteps of ſeducement are the very ſame in Divine and Human truth: for as in Divine truth Man cannot endure to become as a Child; ſo in Human, they reputed the attending the Inductions whereof we ſpeak, as if it were a ſecond Infancy or Childhood.

Thirdly, allow ſome *Principles* or *Axioms* were rightly induced, yet nevertheleſs certain it is that *Middle Propoſitions* cannot be deduced from them in *Subject of Nature* by *Syllogiſm*, that is, *by Touch and Reduction of them to Principles in a Middle Term.* It is true that in Sciences popular, as *Moralities*, *Laws*, and the like, yea, and *Divinity* (becauſe it pleaſeth GOD to apply himſelf to the capacity of the ſimpleſt), that form may have uſe; and in *Natural Philoſophy* likewiſe, by way of argument or ſatisfactory *Reaſon*, *Quæ aſſenſum parit, operis effœta eſt:* but the ſubtlety of Nature and

Operations will not be enchained in thoſe bonds: for *Arguments* conſiſt of *Propoſitions* and *Propoſitions* of *Words;* and *Words* are but the *Current Tokens or Marks of popular Notions of things;* which Notions, if they be groſſly and variably collected out of particulars, it is not the laborious examination either *of Conſequences of Arguments*, *or of the truth of Propoſitions*, that can ever correct that Error, being, as the Phyſicians ſpeak, in the firſt digeſtion: and therefore it was not without cauſe, that ſo many excellent Philoſophers became *Sceptics* and *Academics*, and denied any certainty of Knowledge or Comprehenſion; and held opinion, that the knowledge of man extended only to Appearances and Probabilities. It is true that in *Socrates* it was ſuppoſed to be but a form of *Irony*, *Scientiam diſſimulando ſimulavit:* for he uſed to diſable his knowledge, to the end to enhance his Knowledge; like the Humour of *Tiberius* in his beginnings, that would Reign, but would not acknowledge ſo much: and in the later *Academy*, which *Cicero* embraced, this opinion alſo of *Acatalepſia*, I doubt, was not held ſincerely: for that all thoſe which excelled in Copia of ſpeech ſeem to have choſen that Sect, as that which was fitteſt to give glory to their eloquence and variable diſcourſes; being rather like Progreſſes of pleaſure, than Journeys to an end. But aſſuredly many ſcattered in both *Academies* did hold it in ſubtilty and integrity: but here was their chief Error; they charged the deceit upon *the Senſes;* which in my

Judgment, notwithſtanding all their Cavillations, are very ſufficient to certify and report truth, though not always immediately, yet by compariſon, by help of inſtrument, and by producing and urging ſuch things as are too ſubtile for the ſenſe to ſome effect comprehenſible by the ſenſe, and other like aſſiſtance. But they ought to have charged the deceit *upon the weakneſs of the intellectual powers, and upon the manner of collecting and concluding upon the reports of the ſenſes.* This I ſpeak, not to diſable the mind of man, but to ſtir it up to ſeek help: for no man, be he never ſo cunning or practiſed, can make a ſtraight line or perfect circle by ſteadineſs of hand, which may be eaſily done by help of a Ruler or Compaſs.

This part of *Invention*, concerning the *Invention* of *Sciences*, I purpoſe, if GOD give me leave, hereafter to propound, having digeſted it into two parts; whereof the one I term *Experientia Literata*, and the other *Interpretatio Naturæ:* the former being but a degree and rudiment of the latter. But I will not dwell too long, nor ſpeak too great upon a promiſe.

The *Invention* of ſpeech or argument is not properly an *Invention:* for to *Invent* is to diſcover that we know not, and not to recover or reſummon that which we already know: and the uſe of this *Invention* is no other *but, out of the Knowledge whereof our mind is already poſſeſſed, to draw forth or call before us that which may be pertinent to the purpoſe which we take into our conſideration.* So as

to ſpeak truly, it is no *Invention*, but a *Remembrance* or *Suggeſtion*, with an Application; which is the cauſe why the Schools do place it after Judgment, as ſubſequent and not precedent. Nevertheleſs, becauſe we do account it a Chaſe, as well of Deer in an incloſed Park as in a Foreſt at large, and that it hath already obtained the name, let it be called *Invention:* ſo as it be perceived and diſcerned, that the Scope and end of this *Invention* is readineſs and preſent uſe of our knowledge, and not addition or amplification thereof.

To procure this ready uſe of Knowledge there are two Courſes, *Preparation* and *Suggeſtion*. The former of theſe ſeemeth ſcarcely a part of Knowledge, conſiſting rather of Diligence than of any artificial erudition. And herein *Ariſtotle* wittily, but hurtfully, doth deride the *Sophiſts* near his time, ſaying, *They did as if one that profeſſed the Art of Shoe-making ſhould not teach how to make a Shoe, but only exhibit, in a readineſs a number of Shoes of all faſhions and Sizes.* But yet a man might reply, that if a Shoemaker ſhould have no Shoes in his Shop, but only work as he is beſpoken, he ſhould be weakly cuſtomed. But our Saviour, ſpeaking of Divine Knowledge, ſaith, *that the Kingdom of Heaven is like a good Houſeholder, that bringeth forth both new and old ſtore;* and we ſee the ancient Writers of *Rhetoric* do give it in precept, that Pleaders ſhould have the Places, whereof they have moſt continual uſe, ready handled in all the variety that may be; as that, to ſpeak for the

literal Interpretation of the Law againſt Equity, and Contrary; and to ſpeak for Preſumptions and Inferences againſt Teſtimony, and Contrary. And *Cicero* himſelf, being broken unto it by great experience, delivereth it plainly, that whatſoever a man ſhall have occaſion to ſpeak of, if he will take the pains, he may have it in effect premeditate, and handled, *in theſi;* ſo that when he cometh to a particular he ſhall have nothing to do, but to add Names, and times, and places, and ſuch other Circumſtances of Individuals. We ſee likewiſe the exact diligence of *Demoſthenes;* who, in regard of the great force that the entrance and acceſs into cauſes hath to make a good impreſſion, had ready framed a number of *Prefaces* for Orations and Speeches. All which Authorities and Precedents may overweigh *Ariſtotle's* opinion, that would have us change a rich Wardrobe for a pair of Shears.

But the Nature of the Collection of this *Proviſion* or *Preparatory Store*, though it be common both to *Logic* and *Rhetoric*, yet having made an entry of it here, where it came firſt to be ſpoken of, I think fit to refer over the further handling of it to *Rhetoric*.

The other part of *Invention*, which I term *Suggeſtion*, doth aſſign and direct us to certain *Marks*, or *Places*, which may excite our Mind to return and produce ſuch Knowledge as it hath formerly collected, to the end we may make uſe thereof. Neither is this uſe, truly taken, only to furniſh argument to diſpute probably with others, but like-

wiſe to Miniſter unto our Judgment to conclude aright within ourſelves. Neither may theſe places ſerve only to prompt our Invention, but alſo to direct our inquiry. For a faculty of wiſe interrogating is half a knowledge. For as *Plato* ſaith, *Whoſoever ſeeketh, knoweth that which he ſeeketh for in a general Notion: elſe how ſhall he know it when he hath found it?* and therefore the larger your *Anticipation* is, the more direct and compendious is your ſearch. But the ſame *Places* which will help us what to produce of that which we know already, will alſo help us, if a man of experience were before us, what queſtions to aſk; or, if we have Books and Authors to inſtruct us, what points to ſearch and revolve; ſo as I cannot report that this part of *Invention*, which is that which the Schools call *Topics*, is deficient.

Nevertheleſs, *Topics* are of two ſorts, *general* and *ſpecial*. The *general* we have ſpoken to; but the particular hath been touched by ſome, but rejected generally as inartificial and variable. But leaving the humour which hath reigned too much in the Schools, which is, to be vainly ſubtle in a few things which are within their command, and to reject the reſt; I do receive particular *Topics*, (that is, places or directions of *Invention* and *Inquiry* in every particular knowledge,) as things of great uſe, being Mixtures of *Logic* withthe Matter of Sciences; for in theſe it holdeth, *Ars inveniendi adoleſcit cum Inventis;* for as in going of a way, we do not only gain that part of the way which is

paſſed, but we gain the better ſight of that part of the way which remaineth: ſo every degree of proceeding in a Science giveth a light to that which followeth; which light if we ſtrengthen by drawing it forth into queſtions or places of inquiry, we do greatly advance our purſuit.

Now we paſs unto the *Arts of Judgment*, which handle the Natures of *Proofs* and *Demonſtrations;* which as to *Induction* hath a Coincidence with *Invention; for in all Inductions, whether in good or vicious form, the ſame action of the Mind which Inventeth, Judgeth; all one as in the ſenſe;* but otherwiſe it is in proof by *Syllogiſm;* for the proof being not immediate, but by mean, the *Invention of the Mean* is one thing, and the *Judgment of the Conſequence* is another; the one *Exciting* only, the other *Examining*. Therefore, for the real and exact form of Judgment, we refer ourſelves to that which we have ſpoken of *Interpretation of Nature*.

For the other Judgment by *Syllogiſm*, as it is a thing moſt agreeable to the Mind of Man, ſo it hath been vehemently and excellently laboured; for the Nature of Man doth extremely covet to have ſomewhat in his Underſtanding fixed and immoveable, and as a Reſt and Support of the Mind. And therefore as *Ariſtotle* endeavoureth to prove, that in all Motion there is ſome point quieſcent; and as he elegantly expoundeth the ancient Fable of *Atlas*, that ſtood fixed, and bare up the Heaven, from falling, to be meant of the Poles or Axle-tree of Heaven, whereupon the Converſion is accompliſhed: ſo aſſuredly men have a deſire to have an

Atlas or Axle-tree within to keep them from fluctuation, which is like to a perpetual peril of falling; therefore men did haſten to ſet down ſome Principles about which the variety of their diſputations might turn.

So then this Art of *Judgment* is but the *Reduction* of *Propoſitions* to *Principles* in a *Middle Term:* the *Principles* to be agreed by all and exempted from Argument; the *Middle term* to be elected at the liberty of every Man's *Invention;* the *Reduction* to be of two kinds, *Direct* and *Inverted;* the one when the *Propoſition* is reduced to the *Principle*, which they term a *Probation oſtenſive;* the other, when the contradictory of the Propoſition is reduced to the contradictory of the Principle, which is that which they call *Per Incommodum*, or *preſſing an abſurdity;* the *Number* of *Middle Terms* to be as the *Propoſition* ſtandeth *Degrees* more or leſs removed from the *Principle.*

But this Art hath two ſeveral Methods of Doctrine, the one by way of *Direction*, the other by way of *Caution:* the former frameth and ſetteth down *a true Form of Conſequence*, by the variations and deflections from which Errors and Inconſequences may be exactly judged; toward the Compoſition and ſtructure of which form, it is incident to handle the parts thereof, which are *Propoſitions*, and the parts of *Propoſitions*, which are *Simple Words:* and this is that part of *Logic* which is comprehended in the *Analytics.*

The ſecond Method of Doctrine was introduced for expedite uſe and aſſurance ſake; diſcovering the

more ſubtle forms of *Sophiſms* and *Illaqueations* with their *redargutions*, which is that which is termed *Elenches*. For although in the more groſs ſorts of Fallacies it happeneth, as *Seneca* maketh the compariſon well, as in juggling feats, which though we know not how they are done, yet we know well it is not as it ſeemeth to be; yet the more ſubtle ſort of them doth not only put a man beſide his anſwer, but doth many times abuſe his Judgment.

This part concerning *Elenches* is excellently handled by *Ariſtotle* in *Precept*, but more excellently by *Plato* in *Example*, not only in the perſons of the *Sophiſts* but even in *Socrates* himſelf; who profeſſing to affirm nothing, but to infirm that which was affirmed by another, hath exactly expreſſed all the forms of objection, fallacy, and redargution. And although we have ſaid that the uſe of this Doctrine is for *Redargution*, yet it is manifeſt the degenerate and corrupt uſe is for *Caption* and *Contradiction*, which paſſeth for a great faculty, and no doubt is of very great advantage: though the difference be good which was made between Orators and Sophiſters, that the one is as the Greyhound, which hath his advantage in the race, and the other as the Hare, which hath her advantage in the turn, ſo as it is the advantage of the weaker creature.

But yet further, this Doctrine of *Elenches* hath a more ample latitude and extent than is perceived; namely, unto divers parts of Knowledge;

whereof ſome are laboured and others omitted. For firſt, I conceive, though it may ſeem at firſt ſomewhat ſtrange, that that part which is variably referred, ſometimes to *Logic*, ſometimes to *Metaphyſics*, touching the *Common adjuncts of Eſſences*, is but an *Elench;* for the great *Sophiſm of all Sophiſms* being *Equivocation* or *Ambiguity of Words* and *Phraſe*, (eſpecially of ſuch words as are moſt general, and intervene, in every Inquiry,) it ſeemeth to me that the true and fruitful uſe, leaving vain ſubtilties and ſpeculations, of the Inquiry of *Majority*, *Minority*, *Priority*, *Poſteriority*, *Identity*, *Diverſity*, *Poſſibility*, *Act*, *Totality*, *Parts*, *Exiſtence*, *Privation*, and the like, are but wiſe Cautions againſt Ambiguities of Speech. So again the diſtribution of things into certain Tribes, which we call *Categories* or *Predicaments*, are but Cautions againſt the confuſion of *Definitions* and *Diviſions*.

Secondly, there is a ſeducement that worketh by the ſtrength of the Impreſſion, and not by the ſubtilty of the Illaqueation; not ſo much perplexing the Reaſon, as overruling it by power of the *Imagination*. But this part I think more proper to handle when I ſhall ſpeak of *Rhetoric*.

But laſtly, there is yet a much more important and profound kind of Fallacies in the Mind of Man, which I find not obſerved or inquired at all, and think good to place here, as that which of all others appertaineth moſt to rectify *Judgment:* the force whereof is ſuch, as it doth not dazzle or ſnare the

underſtanding in ſome particulars, but doth more generally and inwardly infect and corrupt the ſtate thereof. For the mind of Man is far from the Nature of a clear and equal glaſs, wherein the beams of things ſhould reflect according to their true incidence; nay, it is rather like an enchanted glaſs, full of ſuperſtition and Impoſture, if it be not delivered and reduced. For this purpoſe, let us conſider the falſe appearances that are impoſed upon us by the general Nature of the mind, beholding them in an example or two; as firſt, in that inſtance which is the root of all ſuperſtition, namely, *That to the Nature of the Mind of all Men it is conſonant for the Affirmative or Active to affect more than the negative or Privative:* ſo that a few times hitting or preſence, countervails oft-times failing or abſence; as was well anſwered by *Diagoras* to him that ſhewed him in *Neptune's* Temple the great number of pictures of ſuch as had eſcaped Shipwreck and had paid their Vows to *Neptune*, ſaying, *Adviſe now, you that think it folly to invocate Neptune in tempeſt: Yea, but*, ſaith *Diagoras, where are they painted that are drowned?* Let us behold it in another inſtance, namely, *That the ſpirit of man, being of an equal and uniform ſubſtance, doth uſually ſuppoſe and feign in Nature a greater equality and uniformity than is in truth.* Hence it cometh, that the *Mathematicians* cannot ſatisfy themſelves, except they reduce the Motions of the Celeſtial bodies to perfect Circles, rejecting ſpiral lines, and labouring to be diſcharged of Ec-

centrics. Hence it cometh, that whereas there are many things in Nature, as it were, *Monodica, ſui Juris;* yet the cogitations of Man do feign unto them *Relatives*, *Parallels*, and *Conjugates*, whereas no ſuch thing is; as they have feigned an Element of fire, to keep ſquare with Earth, Water, and Air, and the like: nay, it is not credible, till it be opened, what a number of fictions and fancies the ſimilitude of human Actions and Arts, together with the making of Man *Communis Menſura*, have brought into Natural Philoſophy; not much better than the Hereſy of the *Anthropomorphites*, bred in the Cells of groſs and ſolitary Monks, and the opinion of *Epicurus*, anſwerable to the ſame in heatheniſm, who ſuppoſed the Gods to be of human Shape. And therefore *Velleius* the Epicurean needed not to have aſked, why God ſhould have adorned the Heavens with Stars, as if he had been an *Ædilis*, one that ſhould have ſet forth ſome magnificent ſhows or plays. For if that great Workmaſter had been of a Human diſpoſition, he would have caſt the ſtars into ſome pleaſant and beautiful works and orders, like the frets in the Roofs of Houſes; whereas one can ſcarce find a Poſture in ſquare, or triangle, or ſtraight line, amongſt ſuch an infinite number; ſo differing a Harmony there is between the ſpirit of Man and the ſpirit of Nature.

Let us conſider again the falſe appearances impoſed upon us by every Man's own individual Nature and Cuſtom, in that feigned ſuppoſition that

Plato maketh of the Cave: for certainly if a child were continued in a Grot or Cave under the Earth until maturity of age, and came ſuddenly abroad, he would have ſtrange and abſurd Imaginations. So in like manner, although our perſons live in the view of Heaven, yet our ſpirits are included in the Caves of our own complexions and Cuſtoms, which miniſter unto us infinite Errors and vain opinions, if they be not recalled to examination. But hereof we have given many examples in one of the Errors, or peccant humours, which we ran briefly over in our firſt Book.

And laſtly, let us conſider the falſe appearances that are impoſed upon us by words, which are framed and applied according to the conceit and capacities of the Vulgar ſort: and although we think we govern our words, and preſcribe it well *Loquendum ut Vulgus, ſentiendum ut ſapientes;* yet certain it is that words, as a *Tartar's* Bow, do ſhoot back upon the underſtanding of the wiſeſt, and mightily entangle and pervert the Judgment; ſo as it is almoſt neceſſary, in all controverſies and diſputations, to imitate the wiſdom of the *Mathematicians*, in ſetting down in the very beginning the definitions of our words and terms, that others may know how we accept and underſtand them, and whether they concur with us or no. For it cometh to paſs, for want of this, that we are ſure to end there where we ought to have begun, which is, in queſtions and differences about words. To conclude therefore, it muſt be confeſſed that it is not

poſſible to divorce ourſelves from theſe fallacies and falſe appearances, becauſe they are inſeparable from our Nature and Condition of life; ſo yet nevertheleſs the Caution of them, (for all *Elenches*, as was ſaid, are but Cautions,) doth extremely import the true conduct of Human Judgment. The particular *Elenches* or *Cautions* againſt theſe three falſe appearances, I find altogether deficient.

There remaineth one part of Judgment of great excellency, which to mine underſtanding is ſo ſlightly touched, as I may report that alſo deficient; which is the application of the differing kinds of Proofs to the differing kinds of Subjects; for there being but four kinds of demonſtrations, that is, by the immediate *Conſent* of the *Mind* or *Senſe*, by *Induction*, by *Syllogiſm*, and by *Congruity* (which is that which *Ariſtotle* calleth *Demonſtration in Orb or Circle*, and not *a Notioribus*;) every of theſe hath certain Subjects in the Matter of Sciences, in which reſpectively they have chiefeſt uſe; and certain others, from which reſpectively they ought to be excluded; and the rigour and curioſity in requiring the more ſevere Proofs in ſome things, and chiefly the facility in contenting ourſelves with the more remiſs proofs in others, hath been amongſt the greateſt cauſes of detriment and hinderance to Knowledge. The diſtributions and aſſignations of demonſtrations, according to the Analogy of Sciences, I note as deficient.

The Cuſtody or retaining of Knowledge is either in *Writing* or *Memory*; whereof *Writing* hath two

parts, the Nature of the *Character*, and the order of the *Entry;* for the Art of *Characters*, or other viſible notes of Words or things, it hath neareſt conjugation with Grammar; and therefore I refer it to the due place: for the *Diſpoſition* and *Collocation* of that Knowledge which we preſerve in Writing, it conſiſteth in a good Digeſt of Common-places; wherein I am not ignorant of the prejudice imputed to the uſe of *Common-place Books*, as cauſing a retardation of Reading, and ſome ſloth or relaxation of Memory. But becauſe it is but a counterfeit thing in Knowledges to be forward and pregnant, except a man be deep and full, I hold the Entry of Common-places, to be a matter of great uſe and eſſence in ſtudying, as that which aſſureth "copia" of Invention, and contracteth Judgment to a ſtrength. But this is true, that of the *Methods* of *Common-places* that I have ſeen, there is none of any ſufficient worth; all of them carrying merely the face of a *School*, and not of a *World;* and referring to vulgar matters and Pedantical Diviſions, without all life, or reſpect to Action.

For the other Principal Part of the Cuſtody of Knowledge, which is *Memory*, I find that faculty in my Judgment weakly inquired of. An Art there is extant of it; but it ſeemeth to me that there are better Precepts than that Art, and better practices of that Art than thoſe received. It is certain the Art, as it is, may be raiſed to points of oſtentation prodigious: but in uſe, as it is now managed, it is

barren, (not burdenſome, nor dangerous to Natural Memory, as is imagined, but barren,) that is, not dexterous to be applied to the ſerious uſe of buſineſs and occaſions. And therefore I make no more eſtimation of repeating a great number of Names or Words upon once hearing, or the pouring forth of a number of Verſes or Rhimes *ex tempore*, or the making of a *Satirical Simile* of every thing, or the turning of every thing to a jeſt, or the falſifying or contradicting of every thing by Cavil, or the like, (whereof in the faculties of the Mind there is great *Copia*, and ſuch as by device and practice may be exalted to an extreme degree of wonder,) than I do of the tricks of *Tumblers*, *Funambuloes*, *Baladines;* the one being the ſame in the *Mind* that the other is in the body, Matters of Strangeneſs without worthineſs.

This Art of *Memory* is but built upon two Intentions; the one *Prenotion*, the other *Emblem*. *Prenotion* diſchargeth the Indefinite ſeeking of that we would remember, and directeth us to ſeek in a narrow Compaſs, that is, ſomewhat that hath Congruity with our *Place of Memory*. *Emblem* reduceth conceits intellectual to Images ſenſible, which ſtrike the *Memory* more; out of which *Axioms*, may be drawn much better Practice than that in uſe; and beſides which *Axioms*, there are divers more touching help of *Memory*, not inferior to them. But I did in the beginning diſtinguiſh, not to report thoſe things deficient, which are but only ill Managed.

There remaineth the fourth kind of *Rational Knowledge*, which is tranſitive, concerning the *expreſſing* or *transferring* our Knowledge to others; which I will term by the general name of *Tradition or Delivery*. *Tradition* hath three parts; the firſt concerning the *Organ of Tradition:* the ſecond concerning the *Method of Tradition;* and the third concerning the *Illuſtration of Tradition*.

For the *Organ of Tradition*, it is either *Speech or Writing:* for *Ariſtotle* ſaith well, *Words are the Images of Cogitations, and Letters are the Images of Words;* but yet it is not of neceſſity that *Cogitations* be expreſſed by the *Medium of Words*. For *whatſoever is capable of ſufficient differences, and thoſe perceptible by the ſenſe, is in Nature competent to expreſs Cogitations*. And therefore we ſee in the Commerce of barbarous People, that underſtand not one another's language, and in the practice of divers that are dumb and deaf, that men's minds are expreſſed in geſtures, though not exactly, yet to ſerve the turn. And we underſtand further, that it is the uſe of *China*, and the Kingdoms of the High *Levant*, to write in *Characters real*, which expreſs neither *Letters nor words in groſs*, but *Things* or *Notions;* inſomuch as Countries and Provinces, which underſtand not one another's language, can nevertheleſs read one another's Writings, becauſe the *Characters* are accepted more generally than the *Languages* do extend; and therefore they have a vaſt multitude of *Characters*, as many, I ſuppoſe, as Radical words.

Theſe *Notes of Cogitations* are of two ſorts; the one when the Note hath ſome *Similitude* or *Congruity* with the *Notion:* the other *Ad Placitum*, having force only by *Contract* or *Acceptation*. Of the former ſort are *Hieroglyphics* and *Geſtures*. For as to *Hieroglyphics*, things of Ancient uſe, and embraced chiefly by the *Ægyptians*, one of the moſt ancient Nations, they are but as continued *Impreſſes* and *Emblems*. And as for *Geſtures*, they are as *Tranſitory Hieroglyphics*, and are to *Hieroglyphics* as *Words ſpoken* are *to Words written*, in that they abide not; but they have evermore, as well as the other, an affinity with the things ſignified: as *Periander*, being conſulted with how to preſerve a tyranny newly uſurped, bid the Meſſenger attend and report what he ſaw him do; and went into his Garden and topped all the higheſt flowers: ſignifying, that it conſiſted in the cutting off and keeping low of the Nobility and *Grandees*. *Ad Placitum*, are the *Characters real* before mentioned, and *Words:* although ſome have been willing by Curious Inquiry, or rather by apt feigning to have derived impoſition of Names from Reaſon and Intendment; a ſpeculation elegant, and, by reaſon it ſearcheth into *Antiquity*, reverent; but ſparingly mixed with truth, and of ſmall fruit. This portion of knowledge, touching the *Notes of things*, and Cogitations in general, I find not inquired, but deficient. And although it may ſeem of no great uſe, conſidering that *Words* and *Writings by letters* do far excel all the other ways; yet becauſe

this part concerneth, as it were, the Mint of knowledge, (for words are the tokens current and accepted for conceits, as Moneys are for values, and that it is fit men be not ignorant that Moneys may be of another kind than gold and ſilver,) I thought good to propound it to better Inquiry.

Concerning *Speech* and *Words*, the Conſideration of them hath produced the Science of *Grammar:* for Man ſtill ſtriveth to reintegrate himſelf in thoſe benedictions, from which by his fault he hath been deprived; and as he hath ſtriven againſt the firſt general Curſe by the Invention of all other Arts, ſo hath he ſought to come forth of the ſecond general Curſe, which was the confuſion of Tongues, by the Art of *Grammar:* whereof the uſe in a mother tongue is ſmall, in a foreign tongue more; but moſt in ſuch Foreign Tongues as have ceaſed to be *Vulgar Tongues*, and are turned only to *learned tongues*. The duty of it is of two Natures; the one *Popular*, which is for the ſpeedy and perfect attaining Languages, as well for intercourſe of Speech as for underſtanding of Authors; the other *Philoſophical*, examining the power and Nature of Words, as they are the footſteps and prints of Reaſon: which kind of *Analogy* between *Words* and *Reaſon* is handled *Sparſim*, brokenly though not entirely; and therefore I cannot report it deficient, though I think it very worthy to be reduced into a Science by itſelf.

Unto *Grammar* alſo belongeth, as an Appendix, the conſideration of the Accidents of Words; which

are Meaſure, ſound, and Elevation or Accent, and the ſweetneſs and harſhneſs of them; whence hath iſſued ſome curious obſervations in *Rhetoric*, but chiefly *Poeſy*, as we conſider it, in reſpect of the verſe and not of the Argument: wherein though men in learned Tongues do tie themſelves to the Ancient Meaſures, yet in modern Languages it ſeemeth to me as free to make new Meaſures of Verſes as of Dances: for a Dance is a meaſured pace, as a Verſe is a meaſured Speech. In theſe things the Senſe is better Judge than the Art;

Cœnæ fercula noſtræ
Mallem convivis quam placuiſſe Cocis.

And of the ſervile expreſſing *Antiquity* in an unlike and an unfit Subject, it is well ſaid, *Quod tempore antiquum videtur, id incongruitate eſt maxime novum.*

For *Ciphers*, they are commonly in Letters or Alphabets, but may be in Words. The kinds of *Ciphers*, beſides the *Simple Ciphers*, with Changes, and intermixtures of *Nulls* and *Non-ſignificants*, are many, according to the Nature or Rule of the infolding, *Wheel-ciphers*, *Key-Ciphers*, *Doubles*, &c. But the virtues of them, whereby they are to be preferred, are three; that they be not laborious to write and read: that they be impoſſible to decipher; and, in ſome caſes, that they be without ſuſpicion. The higheſt Degree whereof is to write *Omnia per omnia;* which is undoubtedly poſſible, with a proportion Quintuple at moſt of the writing infolding to the writing infolded, and noother re-

ſtraint whatſoever. This Art of *Ciphering* hath for Relative an Art of *Deciphering*, by ſuppoſition unprofitable, but, as things are, of great uſe. For ſuppoſe that *Ciphers* were well managed, there be Multitudes of them which exclude the *Decipherer*. But in regard of the rawneſs and unſkilfulneſs of the hands through which they paſs, the greateſt Matters are many times carried in the weakeſt *Ciphers*.

In the Enumeration of theſe private and retired Arts, it may be thought I ſeek to make a great Muſter-Roll of Sciences, naming them for ſhow and oſtentation, and to little other purpoſe. But let thoſe which are ſkilful in them judge whether I bring them in only for appearance, or whether in that which I ſpeak of them, though in few Marks, there be not ſome ſeed of proficience. And this muſt be remembered, that as there be many of great account in their Countries and Provinces, which, when they come up to the Seat of the Eſtate, are but of mean Rank and ſcarcely regarded; ſo theſe Arts, being here placed with the principal and ſupreme Sciences, ſeem petty things: yet to ſuch as have choſen them to ſpend their labours and ſtudies in them, they ſeem great Matters.

For the *Method of tradition*, I ſee it hath moved a Controverſy in our time. But as in Civil buſineſs, if there be a meeting, and men fall at Words, there is commonly an end of the Matter for that time, and no proceeding at all; ſo in Learning, where there is much controverſy, there is many

times little Inquiry. For this part of knowledge of *Method* ſeemeth to me ſo weakly inquired as I ſhall report it deficient.

Method hath been placed, and that not amiſs, in *Logic*, as a part of *Judgment:* for as the Doctrine of *Syllogiſms* comprehendeth the rules of Judgment upon that which is *invented*, ſo the Doctrine of *Method* containeth the rules of *Judgment* upon that which is to be delivered; for *Judgment* precedeth *Delivery*, as it followeth *Invention*. Neither is the *Method* or the *Nature of the Tradition* material only to the *Uſe* of Knowledge, but likewiſe to the *Progreſſion* of Knowledge: for ſince the labour and life of one man cannot attain to perfection of Knowledge, the *Wiſdom* of the *Tradition* is that which inſpireth the felicity of continuance and proceeding. And therefore the moſt real diverſity of *Method*, is of *Method referred to uſe*, and *Method referred to Progreſſion;* whereof the one may be termed *Magiſtral*, and the other of *Probation*.

The latter whereof ſeemeth to be *Via deſerta et intercluſa*. For as Knowledges are now delivered, there is a kind of Contract of Error between the Deliverer and the Receiver: for he that delivereth knowledge, deſireth to deliver it in ſuch form as may be beſt believed, and not as may be beſt examined; and he that receiveth knowledge, deſireth rather preſent ſatisfaction, than expectant Inquiry; and ſo rather not to doubt, than not to err: glory making the Author not to lay open his weakneſs,

and ſloth making the Diſciple not to know his ſtrength.

But knowledge that is delivered as a thread to be ſpun on, ought to be delivered and intimated, if it were poſſible, *in the ſame Method wherein it was invented;* and ſo is it poſſible of knowledge induced. But in this ſame anticipated and prevented knowledge, no man knoweth how he came to the knowledge which he hath obtained. But yet nevertheleſs, *Secundum majus et minus*, a man may reviſit and deſcend unto the foundations of his Knowledge and Conſent; and ſo tranſplant it into another, as it grew in his own Mind. For it is in Knowledges as it is in Plants: if you mean to uſe the Plant, it is no matter for the Roots; but if you mean to remove it to grow, then it is more aſſured to reſt upon roots than Slips: ſo the delivery of Knowledges, as it is now uſed, is as of fair bodies of Trees without the Roots; good for the Carpenter, but not for the Planter. But if you will have Sciences grow, it is leſs matter for the ſhaft or body of the Tree, ſo you look well to the taking up of the Roots: of which kind of delivery the *Method* of the *Mathematics*, in that Subject, hath ſome ſhadow: but generally I ſee it neither put in ure nor put in Inquiſition, and therefore note it for deficient.

Another diverſity of *Method* there is, which hath ſome affinity with the former, uſed in ſome caſes by the diſcretion of the Ancients, but diſgraced ſince by the Impoſtures of many vain perſons, who have made it as a falſe light for their

counterfeit Merchandiſes; and that is, Enigmatical and Diſcloſed. The pretence whereof is, to remove the vulgar Capacities from being admitted to the ſecrets of Knowledges, and to reſerve them to ſelected Auditors, or wits of ſuch ſharpneſs as can pierce the veil.

Another diverſity of *Method*, whereof the conſequence is great, is the delivery of knowledge in *Aphoriſms*, or in *Methods;* wherein we may obſerve, that it hath been too much taken into Cuſtom, out of a few *Axioms* or Obſervations upon any Subject, to make a ſolemn and formal Art, filling it with ſome Diſcourſes, and illuſtrating it with examples, and digeſting it into a ſenſible *Method:* but the writing in *Aphoriſms* hath many excellent virtues, whereto the writing in *Method* doth not approach.

For firſt, it trieth the Writer, whether he be ſuperficial or ſolid: for *Aphoriſms*, except they ſhould be ridiculous, cannot be made but of the pith and heart of Sciences; for diſcourſe of illuſtration is cut off: Recitals of examples are cut off; Diſcourſe of Connection and order is cut off; Deſcriptions of practice are cut off; ſo there remaineth nothing to fill the *Aphoriſms* but ſome good quantity of Obſervation: and therefore no man can ſuffice, nor in reaſon will attempt to write *Aphoriſms*, but he that is ſound and grounded. But in *Methods*,

Tantum Series juncturaque Pollet,
Tantum de Medio ſumptis accedit honoris;

as a Man ſhall make a great ſhew of an Art,

which, if it were disjointed, would come to little. Secondly, *Methods* are more fit to win Consent or belief, but less fit to point to Action; for they carry a kind of Demonstration in Orb or Circle, one part illuminating another, and therefore satisfy; but particulars, being dispersed, do best agree with dispersed directions. And lastly, *Aphorisms*, representing a knowledge broken, do invite men to inquire farther; whereas *Methods*, carrying the shew of a Total, do secure men, as if they were at farthest.

Another Diversity of *Method*, which is likewise of great weight, is the handling of knowledge by *Assertions* and *their Proofs*, or by *Questions* and their *Determinations*; the latter kind whereof, if it be immoderately followed, is as prejudicial to the proceeding of Learning, as it is to the proceeding of an Army to go about to besiege every little Fort or Hold. For if the Field be kept, and the sum of the Enterprise pursued, those smaller things will come in of themselves: indeed a Man would not leave some important piece with an Enemy at his back. In like manner, the use of Confutation in the delivery of Sciences ought to be very sparing; and to serve to remove strong Preoccupations and Prejudgments, and not to minister and excite Disputations and doubts.

Another Diversity of *Method* is, *According to the Subject or Matter which is handled*; for there is a great difference in Delivery of the *Mathematics*, which are the most abstracted of knowledges,

and *Policy*, which is the moſt immerſed: and howſoever contention hath been moved, touching a *Uniformity* of *Method* in *Multiformity* of matter, yet we ſee how that opinion, beſides the weakneſs of it, hath been of ill deſert towards Learning, as that which taketh the way to reduce Learning to certain empty and barren Generalities; being but the very Huſks and Shells of Sciences, all the kernel being forced out and expulſed with the torture and preſs of the *Method:* and therefore as I did allow well of *Particular Topics* for *Invention*, ſo I do allow likewiſe of *particular Methods of Tradition.*

Another Diverſity of *Judgment* in the delivery and teaching of knowledge is, *According unto the light and preſuppoſitions of that which is delivered;* for that knowledge which is new, and foreign from opinions received, is to be delivered in another form than that that is agreeable and familiar; and therefore *Ariſtotle*, when he thinks to tax *Democritus*, doth in truth commend him, where he ſaith, *If we ſhall indeed diſpute, and not follow after Similitudes, &c.* For thoſe whoſe conceits are ſeated in popular opinions, need only but to prove or diſpute; but thoſe whoſe Conceits are beyond popular opinions, have a double labour; the one to make themſelves conceived, and the other to prove and demonſtrate: ſo that it is of neceſſity with them to have recourſe to ſimilitudes and tranſlations to expreſs themſelves. And therefore in the Infancy of Learning, and in rude times, when

thoſe Conceits which are now trivial were then new, the World was full of *Parables* and *Similitudes;* for elſe would men either have paſſed over without Mark, or elſe rejected for Paradoxes that which was offered before they had underſtood or judged. So in Divine Learning, we ſee how frequent *Parables* and *Tropes* are: for it is a Rule, *That whatſoever Science is not conſonant to preſuppoſitions, muſt pray in aid of Similitudes.*

There be alſo other Diverſities of *Methods*, vulgar and received: as that of *Reſolution*, or *Analyſis*, of *Conſtitution* or *Syſtaſis*, of *Concealment* or *Cryptic*, *&c.* which I do allow well of, though I have ſtood upon thoſe which are leaſt handled and obſerved. All which I have remembered to this purpoſe, becauſe I would erect and conſtitute one general Inquiry, which ſeems to me deficient, touching the *Wiſdom of Tradition.*

But unto this part of Knowledge concerning *Methods* doth farther belong not only the *Architecture* of the whole frame of a Work, but alſo the ſeveral beams and Columns thereof; not as to their ſtuff, but as to their quantity and figure: and therefore *Method* conſidereth not only the diſpoſition of the *Argument* or *Subject*, but likewiſe the *Propoſitions:* not as to their *Truth* or *Matter*, but as to their *Limitation* and *Manner.* For herein *Ramus* merited better a great deal in reviving the good Rules of *Propoſitions*, Καθόλου πρῶτον κατὰ παντός, *&c.* than he did in introducing the Canker of *Epitomes;* and yet (as it is the Condition of Human

things that, according to the ancient Fables, *The moſt precious things have the moſt pernicious Keepers;*) it was ſo, that the attempt of the one made him fall upon the other. For he had need be well conducted that ſhould deſign to make *Axioms Convertible*, if he make them not withal *Circular*, and *Non promovent*, or *incurring into themſelves:* but yet the Intention was excellent.

The other Conſiderations of *Method*, concerning *Propoſitions*, are chiefly touching the utmoſt Propoſitions, which limit the Dimenſions of Sciences: for every Knowledge may be fitly ſaid, beſides the *Profundity*, (which is the truth and ſubſtance of it, that makes it *ſolid*,) to have a *Longitude* and a *Latitude;* accounting the latitude towards other Sciences, and the Longitude towards Action; that is, from the greateſt Generality to the moſt particular Precept: the one giveth Rule how far one knowledge ought to intermeddle within the Province of another, which is the Rule they call Καθαυτὸ; the other giveth Rule unto what degree of particularity a knowledge ſhould deſcend: which latter I find paſſed over in ſilence, being in my Judgment the more material; for certainly there muſt be ſomewhat left to practice; but how much is worthy the Inquiry. We ſee remote and ſuperficial Generalities do but offer Knowledge to ſcorn of practical men; and are no more aiding to practice, than an *Ortelius's* univerſal Map is to direct the way between *London* and *York*. The better ſort of Rules have been not unfitly com-

pared to glaſſes of ſteel unpoliſhed, where you may ſee the Images of things, but firſt they muſt be filed: ſo the Rules will help, if they be laboured and poliſhed by practice. But how Cryſtalline they may be made at the firſt, and how far forth they may be poliſhed aforehand, is the queſtion; the Inquiry whereof ſeemeth to me deficient.

There hath been alſo laboured and put in practice a *Method*, which is not a lawful *Method*, but a *Method* of *Impoſture;* which is, to deliver knowledges in ſuch manner, as men may ſpeedily come to make a ſhew of Learning who have it not: ſuch was the travail of *Raymundus Lullius*, in making that *Art* which bears his name; not unlike to ſome Books of *Typocoſmy*, which have been made ſince; being nothing but a Maſs of words of all Arts, to give men countenance, that thoſe which uſe the terms might be thought to underſtand the Art; which Collections are much like a Fripper's or Broker's Shop, that hath ends of every thing, but nothing of worth.

Now we deſcend to that part which concerneth the *Illuſtration of Tradition*, comprehended in that Science which we call *Rhetoric, or Art of Eloquence;* a Science excellent, and excellently well laboured. For although in true value it is inferior to Wiſdom, (as it is ſaid by GOD to *Moſes*, when he diſabled himſelf for want of this Faculty, *Aaron ſhall be thy ſpeaker, and thou ſhalt be to him as GOD:*) yet with people it is the more mighty: ſo *Solomon* ſaith, *Sapiens Corde appellabitur Pru-*

dens, ſed dulcis Eloquio Majora reperiet; ſignifying, that profoundneſs of Wiſdom will help a Man to a Name or Admiration, but that it is Eloquence that prevaileth in an active life. And as to the labouring of it, the Emulation of *Ariſtotle* with the *Rhetoricians* of his time, and the experience of *Cicero*, hath made them in their Works of *Rhetorics* exceed themſelves. Again, the excellency of examples of *Eloquence* in the Orations of *Demoſthenes* and *Cicero*, added to the perfection of the Precepts of *Eloquence*, hath doubled the progreſſion in this Art; and therefore the Deficiences which I ſhall note will rather be in ſome Collections, which may as Handmaids attend the Art, than in the Rules or uſe of the Art itſelf.

Notwithſtanding, to ſtir the Earth a little about the Roots of this Science, as we have done of the reſt; the duty and Office of *Rhetoric* is, *to apply Reaſon to Imagination* for the better moving of the will. For we ſee *Reaſon* is diſturbed in the Adminiſtration thereof by three Means; by *Illaqueation* or *Sophiſm*, which pertains to *Logic;* by *Imagination* or *Impreſſion*, which pertains to *Rhetoric;* and by *Paſſion* or *Affection*, which pertains to *Morality*. And as in Negotiation with others, men are wrought by cunning, by Importunity, and by vehemency; ſo in this Negotiation within ourſelves, men are undermined by *Inconſequences*, ſolicited and importuned by *Impreſſions* or *Obſervations*, and tranſported by *Paſſions*. Neither is the Nature of Man ſo unfortunately built, as that thoſe

Powers and Arts ſhould have force to diſturb Reaſon, and not to eſtabliſh and advance it: for the end of *Logic* is, to teach a form of Argument to ſecure Reaſon and not to entrap it; the end of *Morality* is to procure the Affections to obey Reaſon, and not to invade it; the end of *Rhetoric* is, to fill the Imagination to ſecond Reaſon, and not to oppreſs it: for theſe abuſes of Arts come in but *Ex obliquo*, for Caution.

And therefore it was great Injuſtice in *Plato*, though ſpringing out of a juſt hatred of the *Rhetoricians* of his time, to eſteem of *Rhetoric* but as a voluptuary Art, reſembling it to Cookery, that mar wholeſome Meats, and help unwholeſome by variety of ſauces to the pleaſure of the taſte. For we ſee that ſpeech is much more converſant in adorning that which is good, than in colouring that which is evil; for there is no man but ſpeaketh more honeſtly than he can do or think: and it was excellently noted by *Thucydides* in *Cleon*, that becauſe he uſed to hold on the bad ſide in Cauſes of eſtate, therefore he was ever inveighing againſt Eloquence and good ſpeech; knowing that no man can ſpeak fair of Courſes ſordid and baſe. And therefore as *Plato* ſaid elegantly, *That Virtue, if ſhe could be ſeen, would move great love and affection;* ſo ſeeing that ſhe cannot be ſhewed to the *Senſe* by corporal ſhape, the next degree is to ſhew her to the *Imagination* in lively repreſentation: for to ſhew her to *Reaſon* only in ſubtilty of Argument, was a thing ever derided in *Chryſippus* and

many of the Stoics; who thought to thruſt virtue upon men by ſharp diſputations and Concluſions, which have no Sympathy with the will of Man.

Again, if the affections in themſelves were pliant and obedient to Reaſon, it were true, there ſhould be no great uſe of perſuaſions and inſinuations to the will, more than of naked propoſition and proofs; but in regard of the continual Mutinies and Seditions of the Affections,

Video meliora, Proboque;
Deteriora ſequor:

reaſon would become Captive and ſervile, if *Eloquence of perſuaſions* did not practiſe and win the *Imagination* from the *affections* part, and contract a Confederacy between the *Reaſon* and *Imagination* againſt the *Affections;* for the Affections themſelves carry ever an appetite to good, as Reaſon doth. The difference is, *that the Affection beholdeth merely the preſent; Reaſon beholdeth the future and ſum of time.* And therefore the *Preſent* filling the *Imagination* more, *Reaſon* is commonly vanquiſhed; but after that force of *Eloquence* and *perſuaſion* hath made things *future* and *remote* appear as *preſent*, then upon the revolt of the Imagination Reaſon prevaileth.

We conclude, therefore, that *Rhetoric* can be no more charged with the colouring of the worſt part, than *Logic* with *Sophiſtry*, or Morality with Vice. For we know the Doctrines of Contraries are the ſame, though the uſe be oppoſite. It ap-

peareth alſo that *Logic* differeth from *Rhetoric*, not only as the *fiſt* from the *palm*, the one cloſe, the other at large; but much more in this, that *Logic* handleth Reaſon exact and in truth, and *Rhetoric* handleth it as it is planted in popular opinions and Manners. And therefore *Ariſtotle* doth wiſely place *Rhetoric* as between *Logic* on the one ſide, and Moral or Civil Knowledge on the other, as participating of both: for the Proofs and Demonſtrations of *Logic* are toward all men indifferent and the ſame; but the Proofs and perſuaſions of *Rhetoric* ought to differ according to the Auditors:

Orpheus in Sylvis, inter Delphinas Arion:

which application, in perfection of *Idea*, ought to extend ſo far, that if a Man ſhould ſpeak of the ſame thing to ſeveral perſons, he ſhould ſpeak to them all reſpectively in ſeveral ways: though this *Politic part of Eloquence in private Speech* it is eaſy for the greateſt Orators to want; whilſt, by the obſerving their well-graced forms of ſpeech, they loſe the volubility of Application: and therefore it ſhall not be amiſs to recommend this to better inquiry, not being curious whether we place it here, or in that part which concerneth Policy.

Now therefore will I deſcend to the deficiences, which, as I ſaid, are but Attendances: and firſt, I do not find the Wiſdom and diligence of *Ariſtotle* well purſued, who began to make a Collection of *the popular ſigns, and colours of good and evil, both ſimple and comparative*, which are as the *Sophiſms* of *Rhetoric*, as I touched before. For Example:

SOPHISMA.

Quod laudatur, bonum: Quod vituperatur, malum.

REDARGUTIO.

Laudat venales qui vult extrudere merces.

Malum eſt, Malum eſt, inquit Emptor: ſed cum receſſerit, tum gloriabitur! The defects in the labour of *Ariſtotle* are three: one, that there be but a few of many; another, that their *Elenches* are not annexed; and the third, that he conceived but a part of the uſe of them: for their uſe is not only in probation, but much more in Impreſſion. For many forms are equal in *Signification* which are differing in *Impreſſion;* as the difference is great in the piercing of that which is ſharp and that which is flat, though the ſtrength of the percuſſion be the ſame: for there is no man but will be a little more raiſed by hearing it ſaid, *Your enemies will be glad of this:*

Hoc Ithacus velit, et magno mercentur Atridæ:

than by hearing it ſaid only, *This is evil for you.*

Secondly, I do reſume alſo that which I mentioned before, touching *Proviſion* or *Preparatory ſtore*, for the Furniture of ſpeech and readineſs of Invention, which appeareth to be of two ſorts; the one in reſemblance to a ſhop of pieces un-made up, the other to a ſhop of things ready made up; both to be applied to that which is frequent and moſt in requeſt: the former of theſe I will call *Antitheta*, and the latter *Formulæ*.

Antitheta are *Theſes* argued *pro et contra;* wherein men may be more large and laborious:

but, in ſuch as are able to do it, to avoid prolixity of entry, I wiſh the ſeeds of the ſeveral arguments to be caſt up into ſome brief and acute ſentences, not to be cited, but to be as Skains or Bottoms of thread, to be unwinded at large when they come to be uſed; ſupplying authorities and Examples by reference.

Pro verbis Legis.

Non eſt interpretatio, ſed divinatio, quæ recedit a literâ: Cum receditur a literâ, Judex tranſit in legiſlatorem.

Pro ſententia Legis.

Ex omnibus verbis eſt eliciendus ſenſus qui interpretatur ſingula:

Formulæ are but decent and apt paſſages or conveyances of ſpeech, which may ſerve indifferently for differing ſubjects; as of *Preface*, *Concluſion*, *Digreſſion*, *Tranſition*, *Excuſation*, *&c.* For as in buildings, there is great pleaſure and uſe in the well caſting of the ſtair-caſes, entries, doors, windows, and the like; ſo in ſpeech, the conveyances and paſſages are of ſpecial ornament and effect.

A concluſion in a Deliberative.

So may we redeem the faults paſſed, and prevent the inconveniences future.

There remain two Appendices touching the tradition of knowledge, the one *Critical*, the other *Pedantical*. For all knowledge is either delivered by Teachers, or attained by men's proper endeavours: and therefore as the principal part of Tradition of knowledge concerneth chiefly *writing of Books*, ſo the Relative part thereof concerneth *reading of Books;* whereunto appertain incidently theſe

conſiderations. The firſt is concerning the true Correction and edition of Authors; wherein nevertheleſs raſh diligence hath done great prejudice. For theſe *Critics* have often preſumed, that that which they underſtand not is falſe ſet down: as the Prieſt that, where he found it written of St. *Paul*, *Demiſſus eſt per ſportam*, mended his book, and made it *Demiſſus eſt per portam;* becauſe *Sporta* was a hard word, and out of his reading: and ſurely their errors, though they be not ſo palpable and ridiculous, are yet of the ſame kind. And therefore, as it hath been wiſely noted, the moſt corrected copies are commonly the leaſt correct.

The ſecond is concerning the expoſition and explication of Authors, which reſteth in Annotations and Commentaries: wherein it is over uſual to blanch the obſcure places, and diſcourſe upon the plain.

The third is concerning the times, which in many caſes give great light to true Interpretations.

The fourth is concerning ſome brief Cenſure and judgment of the Authors; that men thereby may make ſome election unto themſelves what Books to read.

And the fifth is concerning the Syntax and diſpoſition of ſtudies; that men may know in what order or purſuit to read.

For *Pedantical* knowledge, it containeth that difference of *Tradition* which is proper for youth; whereunto appertain divers conſiderations of great fruit.

At firſt, the timing and ſeaſoning of knowledges; as with what to initiate them, and from what for a time to refrain them.

Secondly, the conſideration where to begin with the eaſieſt, and ſo proceed to the more difficult; and in what courſes to preſs the more difficult, and then to turn them to the more eaſy: for it is one Method to practiſe ſwimming with bladders, and another to practiſe dancing with heavy ſhoes.

A third is, the application of learning according unto the propriety of the wits; for there is no defect in the faculties intellectual, but ſeemeth to have a proper cure contained in ſome ſtudies: as for example, if a Child be Bird-witted, that is, hath not the faculty of attention, the Mathematics giveth a remedy thereunto; for in them, if the wit be caught away but a moment, one is to begin anew. And as ſciences have a propriety towards faculties for Cure and help, ſo faculties or powers have a Sympathy towards Sciences for excellency or ſpeedy profiting: and therefore it is an inquiry of great wiſdom, what kinds of wits and Natures are moſt apt and proper for what ſciences.

Fourthly, the ordering of exerciſes is matter of great conſequence to hurt or help: for, as is well obſerved by *Cicero*, men in exerciſing their faculties, if they be not well adviſed, do exerciſe their faults and get ill habits as well as good; ſo there is a great judgment to be had in the continuance and intermiſſion of Exerciſes. It were too long to particularize a number of other conſiderations of

this nature, things but of mean appearance, but of ſingular efficacy. For as the wronging or cheriſhing of ſeeds or young plants is that that is moſt important to their thriving: (and as it was noted that the firſt ſix kings, being in truth as Tutors of the State of *Rome* in the infancy thereof, was the principal cauſe of the immenſe greatneſs of that ſtate which followed:) ſo the culture and manurance of Minds in youth hath ſuch a forcible, though unſeen, operation, as hardly any length of time or contention of labour can countervail it afterwards. And it is not amiſs to obſerve alſo how ſmall and mean faculties gotten by Education, yet when they fall into great men or great matters, do work great and important effects; whereof we ſee a notable example in *Tacitus* of two Stage players, *Percennius* and *Vibulenus*, who by their faculty of playing put the *Pannonian* armies into an extreme tumult and combuſtion: for there ariſing a mutiny amongſt them upon the death of *Auguſtus Cæſar*, *Blæſus* the lieutenant had committed ſome of the Mutineers, which were ſuddenly reſcued; whereupon *Vibulenus* got to be heard ſpeak, which he did in this manner:—*Theſe poor innocent wretches, appointed to cruel death, you have reſtored to behold the light; but who ſhall reſtore my brother to me, or life unto my brother, that was ſent hither in meſſage from the legions of Germany, to treat of the common Cauſe? and he hath murdered him this laſt night by ſome of his fencers and ruffians, that he hath about him for his executioners upon Soldiers. An-*

ſwer, Blæſus, what is done with his body? The mortaleſt Enemies do not deny burial. When I have performed my laſt duties to the Corpſe with kiſſes, with tears, command me to be ſlain beſide him; ſo that theſe my fellows, for our good meaning, and our true hearts to the Legions, may have leave to bury us. With which ſpeech he put the army into an infinite fury and uproar: whereas truth was he had no brother, neither was there any ſuch matter; but he played it merely as if he had been upon the ſtage.

But to return: we are now come to a period of *Rational Knowledges;* wherein if I have made the *diviſions* other than thoſe that are received, yet would I not be thought to diſallow all thoſe diviſions which I do not uſe; for there is a double neceſſity impoſed upon me of altering the diviſions. The one, becauſe it differeth in end and purpoſe, to ſort together thoſe things which are next in Nature, and thoſe things which are next in uſe; for if a ſecretary of State ſhould ſort his papers, it is like in his ſtudy or general Cabinet he would ſort together things of a Nature, as Treaties, Inſtructions, &c. but in his Boxes or particular Cabinet he would ſort together thoſe that he were like to uſe together, though of ſeveral Natures; ſo in this general Cabinet of knowledge it was neceſſary for me to follow the diviſions of the Nature of things; whereas if myſelf had been to handle any particular knowledge, I would have reſpected the *Diviſions fitteſt for uſe.* The other, becauſe the

bringing in of the *Deficiences* did by Conſequence alter the *Partitions* of the reſt: for let the knowledge extant, for demonſtration ſake, be fifteen; let the knowledge with the Deficiences be twenty; the parts of fifteen are not the parts of twenty; for the parts of fifteen are three and five; the parts of twenty are two, four, five, and ten; ſo as theſe things are without Contradiction, and could not otherwiſe be.

WE proceed now to that knowledge which conſidereth of the *Appetite* and *Will* of man; whereof *Solomon* ſaith, *Ante omnia, fili, cuſtodi cor tuum; nam inde procedunt actiones vitæ.* In the handling of this ſcience, thoſe which have written ſeem to me to have done as if a man, that profeſſed to teach to write did only exhibit fair copies of *Alphabets* and letters joined, without giving any precepts or directions for the carriage of the hand and framing of the letters: ſo have they made good and fair Exemplars and copies, carrying the draughts and portraitures of *Good*, *Virtue*, *Duty*, *Felicity;* propounding them well deſcribed as the true objects and ſcopes of man's will and deſires; but how to attain theſe excellent marks, and how to frame and ſubdue the Will of Man to become true and conformable to theſe purſuits, they paſs it over altogether, or ſlightly and unprofitably: for it is not the diſputing, that moral virtues are in the Mind of man by habit and not by nature, or the diſtinguiſhing that

generous ſpirits are won by doctrines and perſuaſions, and the vulgar ſort by reward and puniſhment, and the like ſcattered glances and touches, that can excuſe the abſence of this part.

The reaſon of this omiſſion I ſuppoſe to be that hidden Rock whereupon both this and many other Barks of knowledge have been caſt away; which is, that men have deſpiſed to be converſant in ordinary and common matters, the judicious direction whereof nevertheleſs is the wiſeſt doctrine, (for life conſiſteth not in novelties or ſubtilties,) but contrariwiſe they have compounded Sciences chiefly of a certain reſplendent or luſtrous maſs of matter, choſen to give glory either to the ſubtilty of diſputations, or to the eloquence of diſcourſes. But *Seneca* giveth an excellent check to eloquence; *Nocet illis eloquentia, quibus non rerum cupiditatem facit, ſed ſui.* Doctrine ſhould be ſuch as ſhould make men in love with the Leſſon, and not with the Teacher; being directed to the Auditor's benefit, and not to the Author's commendation: and therefore thoſe are of the right kind, which may be concluded as *Demoſthenes* concludes his counſel, *Quæ ſi feceritis, non Oratorem duntaxat in præſentia laudabitis, ſed voſmetipſos etiam non ita multo poſt ſtatu rerum veſtrarum meliore.*

Neither needed men of ſo excellent parts to have deſpaired of a Fortune, which the Poet *Virgil* promiſed himſelf, and indeed obtained, who got as much glory of eloquence, wit, and learning in the expreſſing of the obſervations of huſbandry, as of the heroical acts of *Æneas*:—

Nec ſum animi dubius, verbis ea vincere magnum
Quam ſit, et anguſtis his addere rebus honorem.
Georg. iii. 289.

And ſurely, if the purpoſe be in good earneſt, not to write at leiſure that which men may read at leiſure, but really to inſtruct and ſuborn Action and active life, theſe Georgics of the mind, concerning the huſbandry and tillage thereof, are no leſs worthy than the heroical deſcriptions of *virtue*, *duty*, and *felicity*. Wherefore the main and primitive diviſion of *Moral* knowledge ſeemeth to be into the *Exemplar* or *Platform* of *Good*, and the *Regiment* or *Culture of the Mind:* the one deſcribing the nature of Good, the other preſcribing rules how to ſubdue, apply, and accommodate the Will of Man thereunto.

The Doctrine touching the *Platform* or *Nature* of *Good* conſidereth it either *Simple* or *Compared;* either the kinds of Good, or the degrees of Good; in the latter whereof thoſe infinite diſputations which were touching the ſupreme degree thereof, which they term Felicity, Beatitude, or the higheſt Good, the doctrines concerning which were as the heathen Divinity, are by the Chriſtian faith diſcharged. And as *Ariſtotle* ſaith, *That young men may be happy, but not otherwiſe but by Hope;* ſo we muſt all acknowledge our Minority, and embrace the felicity which is by hope of the future world.

Freed therefore and delivered from this doctrine of the Philoſopher's heaven, whereby they feigned a higher elevation of Man's Nature than was, (for

we ſee in what a height of ſtile *Seneca* writeth, *Vere Magnum, habere fragilitatem hominis, ſecuritatem* DEI,) we may with more ſobriety and truth receive the reſt of their Inquiries and labours; wherein for the *Nature of Good Poſitive or ſimple*, they have ſet it down excellently, in deſcribing the forms of *virtue* and *Duty*, with their ſituations and poſtures; in diſtributing them into their kinds, parts, Provinces, Actions, and Adminiſtrations, and the like: nay farther, they have commended them to Man's Nature and ſpirit, with great quickneſs of Argument and beauty of perſuaſions; yea, and fortified and intrenched them, as much as diſcourſe can do, againſt corrupt and popular opinions. Again, *for the degrees and Comparative Nature of Good*, they have alſo excellently handled it in their triplicity of *Good*, in the compariſon between a Contemplative and an active life, in the diſtinction between virtue with reluctation and virtue ſecured, in their encounters between honeſty and profit, in their balancing of virtue with virtue, and the like; ſo as this part deſerveth to be reported for excellently laboured.

Notwithſtanding, if before they had come to the popular and received Notions of virtue and vice, pleaſure and pain, and the reſt, they had ſtayed a little longer upon the Inquiry concerning the Roots of Good and evil, and the Strings of thoſe Roots, they had given, in my opinion, a great light to that which followed; and eſpecially if they had conſulted with Nature, they had made their doc-

trines leſs prolix and more profound: which being by them in part omitted and in part handled with much Confuſion, we will endeavour to reſume and open in a more clear manner.

There is formed in every thing a double Nature of Good: the one, as every thing is a Total or ſubſtantive in itſelf; the other, as it is a part or Member of a greater Body; whereof the latter is in degree the greater and the worthier, becauſe it tendeth to the conſervation of a more general form. Therefore we ſee the Iron in particular ſympathy moveth to the Loadſtone; but yet if it exceed a certain quantity, it forſaketh the affection to the *Loadſtone*, and like a good patriot moveth to the *Earth*, which is the Region and Country of Maſſy Bodies: ſo may we go forward, and ſee that *Water* and *Maſſy bodies* move to the *centre of the earth;* but rather than to ſuffer a divulſion in the continuance of Nature, they will move upwards from the Centre of the Earth, forſaking their duty to the *Earth* in regard to their duty to the *World.* This double nature of Good, and the comparative thereof, is much more engraven upon man, if he degenerate not: unto whom the conſervation of duty to the public ought to be much more precious than the conſervation of life and being: according to that memorable ſpeech of *Pompeius Magnus*, when being in commiſſion of purveyance for a famine at *Rome*, and being diſſuaded with great vehemency and inſtance by his friends about him, that he ſhould not hazard himſelf to

Sea in an extremity of weather, he ſaid only to them, *Neceſſe eſt ut eam, non ut vivam.* But it may be truly affirmed that there was never any Philoſophy, Religion, or other diſcipline, which did ſo plainly and highly exalt the good which is *Communicative*, and depreſs the good which is private and particular, as the Holy Faith; well declaring that it was the ſame GOD that gave the Chriſtian law to men, who gave thoſe Laws of nature to inanimate Creatures that we ſpoke of before; for we read that the elected Saints of GOD have wiſhed themſelves anathematized and razed out of the book of life, in an ecſtaſy of Charity and infinite feeling of *Communion*.

This being ſet down and ſtrongly planted, doth judge and determine moſt of the Controverſies wherein *Moral Philoſophy* is converſant. For firſt, it decideth the queſtion touching the preferment of the Contemplative or active life, and decideth it againſt *Ariſtotle*. For all the reaſons which he bringeth for the Contemplative are private, and reſpecting the pleaſure and dignity of a man's ſelf, in which reſpects, no queſtion, the contemplative life hath the preeminence: not much unlike to that Compariſon, which *Pythagoras* made for the gracing and magnifying of Philoſophy and Contemplation: who being aſked what he was, anſwered, *That if Hiero were ever at the Olympian games, he knew the manner, that ſome came to try their fortune for the Prizes, and ſome came as Merchants to utter their commodities, and ſome came*

to make good cheer and meet their friends, and ſome came to look on; and that he was one of them that came to look on. But men muſt know, that in this Theatre of Man's life it is reſerved only for God and Angels to be lookers on: neither could the like queſtion ever have been received in the Church (notwithſtanding their *Pretioſa in oculis Domini mors ſanctorum ejus*, by which place they would exalt their Civil death and regular profeſſions,) but upon this defence, that the Monaſtical life is not ſimply Contemplative, but performeth the duty either of inceſſant prayers and ſupplications, which hath been truly eſteemed as an office in the church, or elſe of writing or in taking inſtructions for writing concerning the law of God, as *Moſes* did when he abode ſo long in the Mount. And ſo we ſee *Enoch* the ſeventh from *Adam*, who was the firſt Contemplative, and walked with God, yet did alſo endow the Church with prophecy, which St. *Jude* citeth. But for contemplation which ſhould be finiſhed in itſelf, without caſting beams upon ſociety, aſſuredly Divinity knoweth it not.

It decideth alſo the controverſies between *Zeno* and *Socrates*, and their Schools and ſucceſſions, on the one ſide, who placed felicity in virtue ſimply or attended, the actions and exerciſes whereof do chiefly embrace and concern ſociety; and on the other ſide, the *Cyrenaics* and *Epicureans*, who placed it in pleaſure, and made virtue, (as it is uſed in ſome comedies of Errors, wherein the Miſtreſs and the Maid change habits,) to be but as a ſer-

vant, without which pleaſure cannot be ſerved and attended, and the reformed ſchool of the Epicureans, which placed it in ſerenity of mind and freedom from perturbation, (as if they would have depoſed *Jupiter* again, and reſtored *Saturn* and the firſt age, when there was no ſummer nor winter, ſpring nor Autumn, but all after one air and ſeaſon,) and *Herillus*, who placed felicity in extinguiſhment of the diſputes of the mind, making no fixed nature of Good and Evil, eſteeming things according to the clearneſs of the deſires, or the reluctation; which opinion was revived in the hereſy of the Anabaptiſts, meaſuring things according to the motions of the ſpirit, and the conſtancy or wavering of belief: all which are manifeſt to tend to private repoſe and contentment, and not to point of ſociety.

It cenſureth alſo the philoſophy of *Epictetus*, which preſuppoſeth that felicity muſt be placed in thoſe things which are in our power, leſt we be liable to fortune and diſturbance: as if it were not a thing much more happy to fail in good and virtuous ends for the public, than to obtain all that we can wiſh to ourſelves in our proper fortune; as *Gonſalvo* ſaid to his ſoldiers, ſhewing them *Naples*, and proteſting, *He had rather die one foot forwards, than to have his life ſecured for long by one foot of retreat.* Whereunto the wiſdom of that heavenly Leader hath ſigned, who hath affirmed that *a good Conſcience is a continual Feaſt;* ſhewing plainly

that the conſcience of good intentions, howſoever ſucceeding, is a more continual joy to nature, than all the proviſion which can be made for ſecurity and repoſe.

It cenſureth likewiſe that abuſe of Philoſophy, which grew general about the time of *Epictetus*, in converting it into an occupation or profeſſion; as if the purpoſe had been, not to reſiſt and extinguiſh perturbations, but to fly and avoid the cauſes of them, and to ſhape a particular kind and courſe of life to that end; introducing ſuch a health of mind, as was that health of body of which *Ariſtotle* ſpeaketh of *Herodicus*, who did nothing all his life long but intend his health: whereas if men refer themſelves to duties of Society, as that health of Body is beſt, which is ableſt to endure all alterations and extremities; ſo likewiſe that health of Mind is moſt proper, which can go through the greateſt temptations and perturbations. So as *Diogenes's* opinion is to be accepted, who commended not them which abſtained, but them which ſuſtained, and could refrain their Mind *in Præcipitio*, and could give unto the mind, as is uſed in horſemanſhip, the ſhorteſt ſtop or turn.

Laſtly, it cenſureth the Tenderneſs and want of application in ſome of the moſt ancient and reverend Philoſophers and Philoſophical men, that did retire too eaſily from Civil buſineſs, for avoiding of Indignities and perturbations: whereas the reſolution of men truly Moral ought to be ſuch as the

ſame *Gonſalvo* ſaid the honour of a ſoldier ſhould be *E telâ Craſſiore*, and not ſo fine as that every thing ſhould catch in it and endanger it.

To reſume *private* or *particular good*, it falleth into the diviſion of *Good Active and Paſſive:* for this difference of *Good*, not unlike to that which amongſt the *Romans* was expreſſed in the familiar or houſehold terms of *Promus* and *Condus*, is formed alſo in all things, and is beſt diſcloſed in the two ſeveral Appetites in creatures; the one to preſerve or continue themſelves, and the other to dilate or multiply themſelves; whereof the latter ſeemeth to be the worthier: for in Nature the heavens, which are the more worthy, are the *Agent;* and the earth, which is the leſs worthy, is the *Patient*. In the pleaſures of living creatures, that of generation is greater than that of food; in divine Doctrine, *Beatius eſt dare quam accipere;* and in life, there is no man's ſpirit ſo ſoft, but eſteemeth the effecting of ſomewhat that he hath fixed in his deſire, more than ſenſuality: which priority of the Active Good, is much upheld by the Conſideration of our eſtate to be mortal and expoſed to fortune: for if we might have a perpetuity and Certainty in our pleaſures, the *State* of them would advance their price: but when we ſee it is but *Magni æſtimamus Mori tardius,* and *Ne glorieris de craſtino*, *Neſcis Partum diei*, it maketh us to deſire to have ſomewhat ſecured and exempted from time, which are only our deeds and works: as it is ſaid *Opera eorum ſequuntur eos*. The preemi-

nence likewiſe of this active good is upheld by the affection which is natural in man towards variety and proceeding; which in the pleaſures of the ſenſe, which is the principal part of *Paſſive* Good, can have no great latitude: *Cogita quamdiu eadem feceris; Cibus, Somnus, Ludus per hunc Circulum curritur; mori velle non tantum fortis, aut miſer, aut prudens, ſed etiam faſtidioſus poteſt.* But in enterpriſes, purſuits, and purpoſes of life, there is much variety; whereof men are ſenſible with pleaſure in their inceptions, progreſſions, recoils, reintegrations, approaches and attainings to their ends: ſo as it was well ſaid, *Vita ſine propoſito languida et vaga eſt.* Neither hath this Active Good an Identity with the good of Society, though in ſome caſe it hath an incidence into it; for although it do many times bring forth Acts of *Beneficence*, yet it is with a reſpect private to a man's own power, glory, amplification, continuance; as appeareth plainly, when it findeth a contrary Subject. For that Gigantine ſtate of mind which poſſeſſeth the troublers of the world (ſuch as was *Lucius Sylla*, and infinite other in ſmaller model, who would have all men happy or unhappy as they were their friends or Enemies, and would give form to the world, according to their own humours, which is the true *Theomachy*,) pretendeth and aſpireth to Active good, though it recedeth fartheſt from good of Society, which we have determined to be the greater.

To reſume *Paſſive Good*, it receiveth a ſubdivi-

ſion of *Conſervative* and *Perfective*. For let us take a brief Review of that which we have ſaid: we have ſpoken firſt of the Good of Society, the intention whereof embraceth the Form of Human Nature, whereof we are members and Portions, and not our own proper and Individual form: we have ſpoken of Active good, and ſuppoſed it as a part of Private and particular good: and rightly, for there is impreſſed upon all things a triple deſire or appetite proceeding from love to themſelves; one of *preſerving and continuing* their form; another of *Advancing and Perfecting* their form; and a third of *multiplying* and extending their form upon other things: whereof the multiplying, or ſignature of it upon other things, is that which we handled by the name of Active good. So as there remaineth the conſerving of it, and perfecting or raiſing of it; which latter is the higheſt degree of Paſſive good. For to preſerve in ſtate is the leſs, to preſerve with advancement is the greater. So in man,—

Igneus eſt ollis vigor, et cœleſtis origo.

His approach or Aſſumption to divine or Angelical Nature is the perfection of his form; the error or falſe Imitation of which good is that which is the tempeſt of human life; while man, upon the inſtinct of an advancement *Formal* and *Eſſential*, is carried to ſeek an advancement *Local*. For as thoſe which are ſick, and find no remedy, do tumble up and down and change place, as if by a Re-

move Local they could obtain a Remove Internal; ſo is it with men in ambition, when failing of the means to exalt their *Nature*, they are in a perpetual eſtuation to exalt their *Place*. So then *Paſſive Good* is, as was ſaid, either *Conſervative* or *Perfective*.

To reſume the good of *Conſervation* or *Comfort*, which conſiſteth *in the fruition of that which is agreeable to our Natures;* it ſeemeth to be the moſt pure and Natural of pleaſures, but yet the ſofteſt and the loweſt. And this alſo receiveth a difference, which hath neither been well judged of, nor well inquired: for the good of fruition or contentment is placed either in the *Sincereneſs of the fruition*, or in the *quickneſs and vigour of it;* the one ſuperinduced by the *Equality*, the other by *Viciſſitude;* the one having leſs mixture of *Evil*, the other more impreſſion of *Good*. Which of theſe is the greater good, is a queſtion controverted; but whether man's nature may not be capable of both, is a queſtion not inquired.

The former queſtion being debated between *Socrates* and a *Sophiſt*, *Socrates* placing felicity in an equal and conſtant peace of mind, and the Sophiſt in much deſiring and much enjoying, they fell from Argument to ill words: the Sophiſt ſaying that *Socrates's* felicity was the felicity of a block or ſtone; and *Socrates* ſaying that the *Sophiſt's* felicity was the felicity of one that had the itch, who did nothing but itch and ſcratch. And both theſe opinions do not want their ſupports: for the opi-

nion of *Socrates* is much upheld by the general conſent even of the Epicures themſelves, that virtue beareth a great part in felicity; and if ſo, certain it is, that virtue hath more uſe in clearing perturbations than in compaſſing deſires. The *Sophiſt's* opinion is much favoured by the Aſſertion we laſt ſpoke of, that *good of Advancement* is greater than *good of ſimple Preſervation;* becauſe every obtaining a deſire hath a ſhew of advancement, as motion though in a Circle hath a ſhew of progreſſion.

But the ſecond queſtion, decided the true way, maketh the former ſuperfluous. For can it be doubted, but that there are ſome who take more pleaſure in enjoying pleaſures than ſome other, and yet nevertheleſs are leſs troubled with the loſs or leaving of them? ſo as this ſame, *Non uti ut non appetas, non appetere ut non metuas, ſunt animi puſilli et diffidentis.* And it ſeemeth to me, that moſt of the doctrines of the Philoſophers are more fearful and cautionary than the Nature of things requireth. So have they increaſed the fear of death in offering to cure it: for when they would have a man's whole life to be but a diſcipline or preparation to die, they muſt needs make men think that it is a terrible Enemy, againſt whom there is no end of preparing. Better ſaith the Poet:

> *Qui finem vitæ extremum inter Munera ponat Naturæ.*

So have they ſought to make men's minds too uniform and harmonical, by not breaking them

ſufficiently to contrary Motions: the reaſon whereof I ſuppoſe to be, becauſe they themſelves were men dedicated to a private, free, and unapplied courſe of life. For as we ſee, upon the lute or like Inſtrument, a *Ground*, though it be ſweet and have ſhew of many changes, yet breaketh not the hand to ſuch ſtrange and hard ſtops and paſſages, as a *Set ſong* or *Voluntary;* much after the ſame Manner was the diverſity between a Philoſophical and a civil life. And therefore men are to imitate the wiſdom of Jewellers; who, if there be a grain, or a cloud, or an ice which may be ground forth without taking too much of the ſtone, they help it; but if it ſhould leſſen and abate the ſtone too much, they will not meddle with it: ſo ought men ſo to procure *Serenity* as they deſtroy not magnanimity.

Having, therefore, deduced the *Good* of *Man which is private and particular*, as far as ſeemeth fit; we will now return to that *Good of man which reſpecteth and beholdeth* Society, which we may term Duty: becauſe the term of Duty is more proper to a mind well framed and diſpoſed towards others, as the term of virtue is applied to a mind well formed and compoſed in itſelf: though neither can a man underſtand virtue without ſome relation to Society, nor Duty without an inward diſpoſition. This part may ſeem at firſt to pertain to Science Civil and Politic: but not if it be well obſerved; for it concerneth the Regimen and government of every man over himſelf, and not over others. And as in architecture the direction of framing the poſts,

beams, and other parts of building, is not the ſame with the manner of joining them and erecting the building; and in mechanicals, the direction how to frame an Inſtrument or Engine, is not the ſame with the manner of ſetting it on work and employing it, (and yet neverthelefs in expreſſing of the one you incidentally expreſs the Aptneſs towards the other;) ſo the doctrine of Conjugation of men in Society differeth from that of their conformity thereunto.

This part of Duty is ſubdivided into two parts: the common duty of every man, as a Man or member of a State; the other, the reſpective or ſpecial duty of every man, in his profeſſion, vocation, and place. The firſt of theſe is extant and well laboured, as hath been ſaid. The ſecond likewiſe I may report rather diſperſed than deficient; which manner of diſperſed writing in this kind of Argument I acknowledge to be beſt: for who can take upon him to write of the proper duty, virtue, challenge, and right of every ſeveral vocation, profeſſion and place? For although ſometimes a Looker on may ſee more than a gameſter, and there be a Proverb more arrogant than ſound, *That the vale beſt diſcovereth the hill;* yet there is ſmall doubt but that men can write beſt, and moſt really and materially, in their own profeſſions; and that the writing of ſpeculative men of Active Matter, for the moſt part, doth ſeem to men of Experience, as *Phormio's* Argument of the wars ſeemed to *Hannibal*, to be but dreams and dotage. Only there

is one vice which accompanieth them that write in their own profeſſions, that they magnify them in exceſs. But generally it were to be wiſhed, as that which would make learning indeed ſolid and fruitful, that Active men would or could become writers.

In which kind I cannot but mention, *Honoris cauſa*, your Majeſty's excellent book touching the Duty of a King: a work richly compounded of *Divinity*, *Morality*, *and Policy*, with great aſperſion of all other arts; and being, in mine opinion, one of the moſt ſound and healthful writings that I have read; not diſtempered in the heat of invention, nor in the Coldneſs of negligence; not ſick of Buſineſs, as thoſe are who loſe themſelves in their order, nor of Convulſions, as thoſe which Cramp in matters impertinent; not ſavouring of perfumes and paintings, as thoſe do who ſeek to pleaſe the Reader more than Nature beareth; and chiefly well diſpoſed in the ſpirits thereof, being agreeable to truth and apt for action; and far removed from that Natural infirmity, whereunto I noted thoſe that write in their own profeſſions to be ſubject, which is, that they exalt it above meaſure: for your Majeſty hath truly deſcribed, not a King of *Aſſyria* or *Perſia* in their extern glory, but a *Moſes* or a *David*, Paſtors of their people. Neither can I ever leeſe out of my remembrance, what I heard your Majeſty, in the ſame ſacred ſpirit of Government, deliver in a great cauſe of Judicature, which was, *That Kings ruled by their laws*,

as GOD *did by the laws of Nature; and ought as rarely to put in uſe their ſupreme Prerogative, as* GOD *doth his power of working Miracles.* And yet notwithſtanding, in your book of a free Monarchy, you do well give men to underſtand, that you know the plenitude of the power and right of a King, as well as the Circle of his office and duty. Thus have I preſumed to allege this excellent writing of your Majeſty, as a prime or eminent example of *Tractates* concerning ſpecial and reſpective duties: wherein I ſhould have ſaid as much, if it had been written a thouſand years ſince: neither am I moved with certain Courtly decencies, which eſteem it flattery to praiſe in preſence: no, it is flattery to praiſe in abſence; that is, when either the virtue is abſent, or the occaſion is abſent; and ſo the praiſe is not Natural, but forced, either in truth or in time. But let *Cicero* be read in his *Oration pro Marcello*, which is nothing but an excellent Table of *Cæſar's* virtue, and made *to his face;* beſides the example of many other excellent perſons, wiſer a great deal than ſuch obſervers; and we will never doubt, upon a full occaſion, to give juſt praiſes to preſent or abſent.

But to return: there belongeth further to the handling of this part, touching the Duties of Profeſſions and Vocations, a *Relative or oppoſite*, touching the frauds, cautels, impoſtures, and vices of every profeſſion, which hath been likewiſe handled: but how? rather in a Satire and Cynically, than ſeriouſly and wiſely: for men have rather ſought

by wit to deride and traduce much of that which is good in profeſſions, than with Judgment to diſcover and ſever that which is corrupt. For, as *Solomon* ſaith, he that cometh to ſeek after knowledge with a mind to ſcorn and cenſure, ſhall be ſure to find matter for his humour, but no matter for his Inſtruction: *Quærenti deriſori Scientiam ipſa ſe abſcondit; ſed Studioſo fit obviam.* But the managing of this argument with integrity and truth, which I note as deficient, ſeemeth to me to be one of the beſt fortifications for honeſty and virtue that can be planted. For, as the fable goeth of the *Baſiliſk*, that if he ſee you firſt, you die for it; but if you ſee him firſt, he dieth: ſo is it with deceits and evil hearts; which, if they be firſt eſpied they leeſe their life; but if they prevent, they endanger. So that we are much beholden to *Machiavel* and others, that write what men do, and not what they ought to do. For it is not poſſible to join ſerpentine wiſdom with the Columbine Innocency, except men know exactly all the conditions of the *Serpent;* his baſeneſs and going upon his belly, his volubility aud lubricity, his envy and ſting, and the reſt; that is, all forms and Natures of evil: for without this, virtue lieth open and unfenced. Nay, an honeſt man can do no good upon thoſe that are wicked, to reclaim them, without the help of the knowledge of evil. For men of corrupted minds preſuppoſe that honeſty groweth out of Simplicity of manners, and believing of Preachers, ſchoolmaſters, and Men's exterior language:

ſo as, except you can make them perceive that you know the utmoſt reaches of their own corrupt opinions, they deſpiſe all morality; *Non recipit ſtultus verba prudentiæ, niſi ea dixeris quæ verſantur in Corde ejus.*

Unto this part, touching *Reſpective duty*, doth alſo appertain the duties between huſband and wife, parent and child, Maſter and Servant: ſo likewiſe the laws of friendſhip and Gratitude, the civil bond of Companies, Colleges, and Politic Bodies, of neighbourhood, and all other proportionate duties; not as they are parts of Government and Society, but as to the framing of the mind of particular perſons.

The knowledge concerning *good reſpecting Society* doth handle it alſo, not *ſimply* alone, but *Comparatively;* whereunto belongeth the weighing of duties between perſon and perſon, Caſe and Caſe, particular and public: as we ſee in the proceeding of *Lucius Brutus* againſt his own Sons, which was ſo much extolled; yet what was ſaid?

Infelix, utcunque ferent ea fata Minores.

So the caſe was doubtful, and had opinion on both ſides. Again, we ſee when *M. Brutus* and *Caſſius* invited to a ſupper certain whoſe opinions they meant to feel, whether they were fit to be made their Aſſociates, and caſt forth the queſtion touching the *Killing of a Tyrant* being a uſurper, they were divided in opinion; ſome holding that Servitude was the Extreme of Evils, and others that

Tyranny was better than a Civil war: and a number of the like caſes there are of comparative duty; amongſt which that of all others is the moſt frequent, where the queſtion is of a great deal of good to enſue of a ſmall Injuſtice, which *Jaſon* of *Theſſalia* determined againſt the truth: *Aliqua ſunt injuſte facienda, ut multa juſte fieri poſſint.* But the reply is good, *Auctorem præſentis Juſtitiæ habes, ſponſorem futuræ non habes.* Men muſt purſue things which are juſt in preſent, and leave the future to the divine Providence. So then we paſs on from this general part touching the Exemplar and deſcription of Good.

Now therefore that we have ſpoken of this fruit of life, it remaineth to ſpeak of the Huſbandry that belongeth thereunto; without which part the former ſeemeth to be no better than a fair Image, or *ſtatua*, which is beautiful to contemplate, but is without life and motion; whereunto *Ariſtotle* himſelf ſubſcribeth in theſe words: *Neceſſe eſt ſcilicet de virtute dicere, et quid ſit, et ex quibus gignatur. Inutile enim fere fuerit virtutem quidem noſſe, acquirendæ autem ejus modos et vias ignorare: non enim de virtute tantum, qua ſpecie ſit, quærendum eſt, ſed et quomodo ſui copiam faciat: utrumque enim volumus, et rem ipſam noſſe, et ejus compotes fieri: hoc autem ex voto non ſuccedet, niſi ſciamus et ex quibus et quomodo.* In ſuch full words and with ſuch iteration doth he inculcate this part. So ſaith *Cicero* in great Commendation of *Cato* the ſecond, that he had applied himſelf to Philoſophy, *Non ita*

diſputandi Cauſa, ſed ita vivendi. And although the neglect of our times, wherein few men do hold any Conſultations touching the reformation of their life, (as *Seneca* excellently ſaith) *De partibus vitæ quiſque deliberat, de ſummâ nemo*, may make this part ſeem ſuperfluous; yet I muſt conclude with that *Aphoriſm of Hippocrates, Qui gravi morbo correpti dolores non ſentiunt, iis mens ægrotat;* they need medicine, not only to aſſuage the diſeaſe, but to awake the ſenſe. And if it be ſaid, that the cure of men's Minds belongeth to ſacred divinity, it is moſt true: but yet Moral Philoſophy may be preferred unto her as a wiſe ſervant and humble handmaid. For as the Pſalm ſaith, *that the eyes of the handmaid look perpetually towards the Miſtreſs*, and yet no doubt many things are left to the diſcretion of the handmaid, to diſcern of the miſtreſs's will; ſo ought Moral Philoſophy to give a conſtant attention to the doctrines of Divinity, and yet ſo as it may yield of herſelf, within due limits, many ſound and profitable directions.

This Part therefore, becauſe of the excellency thereof, I cannot but find exceeding ſtrange that it is not reduced to written inquiry; the rather, becauſe it conſiſteth of much matter, wherein both ſpeech and action is often converſant; and ſuch wherein the common talk of men, (which is rare, but yet cometh ſometimes to paſs,) is wiſer than their Books. It is reaſonable therefore that we propound it in the more particularity, both for the worthineſs, and becauſe we may acquit ourſelves

for reporting it deficient; which ſeemeth almoſt incredible, and is otherwiſe conceived and preſuppoſed by thoſe themſelves that have written. We will therefore enumerate ſome heads or Points thereof, that it may appear the better what it is, and whether it be extant.

Firſt, therefore, in this, as in all things which are practical, we ought to caſt up our account, what is in our power, and what not; for the one may be dealt with by way of alteration, but the other by way of application only. The huſbandman cannot command, neither the Nature of the Earth, nor the ſeaſons of the weather; no more can the Phyſician the conſtitution of the patient, nor the variety of Accidents: ſo in the Culture and Cure of the mind of Man, two things are without our command; Points of Nature, and points of Fortune; for to the *Baſis* of the one, and the Conditions of the other, our work is limited and tied. In theſe things therefore, it is left unto us to proceed by application.

Vincenda eſt omnis fortuna ferendo:

and ſo likewiſe,

Vincenda eſt omnis Natura ferendo.

But when that we ſpeak of ſuffering, we do not ſpeak of a dull and neglected ſuffering, but of a wiſe and induſtrious ſuffering, which draweth and contriveth uſe and advantage out of that which ſeemeth adverſe and contrary; which is that properly which we call Accommodating or Applying.

Now the wiſdom of Application reſteth principally in the exact and diſtinct knowledge of the precedent ſtate or diſpoſition, unto which we do apply: for we cannot fit a garment, except we firſt take meaſure of the Body.

So then the firſt Article of this knowledge is, to ſet down ſound and true diſtributions and deſcriptions of the ſeveral Characters and tempers of men's Natures and diſpoſitions; eſpecially having regard to thoſe differences which are moſt radical in being the fountains and Cauſes of the reſt, or moſt frequent in Concurrence or Commixture; wherein it is not the handling of a few of them in paſſage, the better to deſcribe the Mediocrities of virtues, that can ſatisfy this intention. For if it deſerve to be conſidered, *that there are minds which are proportioned to great matters, and others to ſmall*, (which *Ariſtotle* handleth, or ought to have handled, by the name of Magnanimity;) doth it not deſerve as well to be conſidered, *that there are minds proportioned to intend many matters, and others to few?* So that ſome can divide themſelves: others can perchance do exactly well, but it muſt be but in few things at once: and ſo there cometh to be a *Narrowneſs of mind*, as well as a *Puſillanimity*. And again, *that ſome minds are proportioned to that which may be diſpatched at once, or within a ſhort return of time; others to that which begins afar off, and is to be won with length of purſuit;*

Jam tum tenditque fovetque.

So that there may be fitly ſaid to be a longanimity, which is commonly alſo aſcribed to GOD as a *Magnanimity*. So further deſerved it to be conſidered by *Ariſtotle; that there is a diſpoſition in Converſation, (ſuppoſing it in things which do in no ſort touch or concern a man's ſelf,) to ſoothe and pleaſe; and a diſpoſition contrary to contradict and croſs:* and deſerveth it not much better to be conſidered, *that there is a diſpoſition, not in converſation or talk, but in matter of more ſerious Nature, (and ſuppoſing it ſtill in things merely indifferent,) to take pleaſure in the good of another: and a diſpoſition contrariwiſe, to take diſtaſte at the good of another?* which is that properly which we call good nature or ill nature, benignity or malignity: and therefore I cannot ſufficiently marvel that this part of knowledge, touching the ſeveral Characters of natures and diſpoſitions, ſhould be omitted both in Morality and Policy; conſidering it is of ſo great miniſtry and ſuppeditation to them both. A man ſhall find in the traditions of Aſtrology ſome pretty and apt diviſions of men's natures, according to the predominances of the Planets; *lovers of Quiet, lovers of Action, lovers of Victory, lovers of Honour, lovers of Pleaſure, lovers of Arts, lovers of Change*, and ſo forth. A man ſhall find in the wiſeſt ſort of theſe Relations which the *Italians* make touching *Conclaves*, the natures of the ſeveral Cardinals handſomely and livelily painted forth: a man ſhall meet with in every day's Conference, the denominations of *Senſitive, dry, formal, real, humorous, certain,*

Huomo di prima impreſſione, *Huomo di ultima impreſſione*, and the like: and yet nevertheleſs this kind of obſervations wandereth in words, but is not fixed in Inquiry. For the diſtinctions are found many of them, but we conclude no precepts upon them: wherein our fault is the greater; becauſe both Hiſtory, Poeſy, and daily Experience are as goodly fields where theſe Obſervations grow; whereof we make a few Poſies to hold in our hands, but no man bringeth them to the Confectionary, that Receipts might be made of them for the uſe of life.

Of much like kind are thoſe impreſſions of Nature, which are impoſed upon the mind *by the Sex*, *by the Age*, *by the Region*, *by health and ſickneſs*, *by beauty and deformity*, and the like, which are inherent and not external; and again, thoſe which are cauſed by external fortune; as *Sovereignty*, *Nobility*, *obſcure birth*, *riches*, *want*, *magiſtracy*, *privateneſs*, *proſperity*, *adverſity*, *conſtant fortune*, *variable fortune*, *riſing per ſaltum*, *per gradus*, and the like. And therefore we ſee that *Plautus* maketh it a wonder to ſee an old man beneficent, *Benignitas hujus ut adoleſcentuli eſt.* St. *Paul* concludeth, that ſeverity of diſcipline was to be uſed to the *Cretans*, *Increpa eos durè*, upon the diſpoſition of their Country, *Cretenſes ſemper mendaces*, *malæ Beſtiæ*, *ventres pigri.* *Salluſt* noteth, that it is uſual with Kings to deſire Contradictories: *Sed plerumque Regiæ voluntates*, *ut vehementes ſunt*, *ſic mobiles*, *ſæpeque ipſæ ſibi adverſæ.* *Ta-*

citus obſerveth how rarely raiſing of the fortune mendeth the diſpoſition: *Solus Veſpaſianus mutatus in melius.* *Pindarus* maketh an obſervation, that great and ſudden fortune for the moſt part defeateth men *Qui magnam felicitatem concoquere non poſſunt.* So the Pſalm ſheweth it is more eaſy to keep a meaſure in the enjoying of fortune, than in the increaſe of fortune: *Divitiæ ſi affluant, nolite Cor apponere.* Theſe obſervations, and the like, I deny not but are touched a little by *Ariſtotle*, as in paſſage, in his Rhetorics, and are handled in ſome ſcattered diſcourſes: but they were never incorporated into Moral Philoſophy, to which they do eſſentially appertain; as the knowledge of the diverſity of grounds and Moulds doth to Agriculture, and the knowledge of the diverſity of Complexions and Conſtitutions doth to the Phyſician; except we mean to follow the indiſcretion of Empirics, which miniſter the ſame medicines to all patients.

Another Article of this knowledge is the Inquiry touching the affections; for as in Medicining of the body, it is in order firſt to know the divers Complexions and Conſtitutions; ſecondly, the diſeaſes; and laſtly, the cures: ſo in medicining of the Mind, after knowledge of the divers characters of men's natures, it followeth, in order, to know the diſeaſes and infirmities of the mind, which are no other than the perturbations and diſtempers of the affections. For as the ancient Politicians in popular States were wont to compare the peo-

ple to the Sea, and the Orators to the winds; becauſe as the ſea would of itſelf be calm and quiet, if the winds did not move and trouble it; ſo the people would be peaceable and tractable, if the ſeditious orators did not ſet them in working and agitation: ſo it may be fitly ſaid, that the mind in the nature thereof would be temperate and ſtayed, if the affections, as winds, did not put it into tumult and perturbation. And here again I find ſtrange, as before, that *Ariſtotle* ſhould have written divers volumes of Ethics, and never handled the affections, which is the principal ſubject thereof; and yet in his Rhetorics, where they are conſidered but collaterally, and in a ſecond degree, *as they may be moved by ſpeech*, he findeth place for them, and handleth them well for the quantity; but where their true place is, he pretermitteth them. For it is not his diſputations about pleaſure and pain that can ſatisfy this inquiry, no more than he that ſhould generally handle the nature of light, can be ſaid to handle the nature of *Colours;* for pleaſure and pain are to the particular affections, as light is to particular colours. Better travails, I ſuppoſe, had the *Stoics* taken in this argument, as far as I can gather by that which we have at ſecond hand. But yet, it is like, it was after their manner, rather in ſubtilty of definitions, (which in a ſubject of this nature are but curioſities,) than inactive and ample deſcriptions and obſervations. So likewiſe I find ſome particular writings of an elegant nature, touching ſome of the affections; as of *Anger*, of *Comfort*

upon adverſe accidents, of *Tenderneſs of countenance*, and other.

But the Poets and writers of Hiſtories are the beſt Doctors of this knowledge; where we may find painted forth with great life, how affections are kindled and incited; and how pacified and refrained; and how again contained from act and further degree; how they diſcloſe themſelves; how they work; how they vary; how they gather and fortify; how they are inwrapped one within another; and how they do fight and encounter one with another; and other the like particularities: amongſt the which this laſt is of ſpecial uſe in Moral and Civil matters; how, I ſay, to ſet affection againſt affection, and to maſter one by another; even as we uſe to hunt beaſt with beaſt, and fly bird with bird, which otherwiſe perhaps we could not ſo eaſily recover: upon which foundation is erected that excellent uſe of *Præmium* and *pœna*, whereby Civil States conſiſt: employing the predominant affections of *fear* and *hope*, for the ſuppreſſing and bridling the reſt. For as in the government of ſtates it is ſometimes neceſſary to bridle one faction with another, ſo it is in the government within.

Now come we to thoſe points which are within our own command, and have force and operation upon the mind, to affect the will and appetite, and to alter manners: wherein they ought to have handled cuſtom, exerciſe, habit, education, example, imitation, emulation, company, friends, praiſe,

reproof, exhortation, fame, laws, books, ſtudies: theſe as they have determinate uſe in moralities, from theſe the mind ſuffereth; and of theſe are ſuch receipts and regimens compounded and deſcribed, as may ſeem to recover or preſerve the health and good eſtate of the mind, as far as pertaineth to human medicine: of which number we will inſiſt upon ſome one or two, as an example of the reſt, becauſe it were too long to proſecute all; and therefore we do reſume Cuſtom and Habit to ſpeak of.

The opinion of *Ariſtotle* ſeemeth to me a negligent opinion, that of thoſe things which conſiſt by Nature, nothing can be changed by Cuſtom; uſing for example, that if a ſtone be thrown ten thouſand times up, it will not learn to aſcend; and that by often ſeeing or hearing, we do not learn to ſee or hear the better. For though this principle be true in things wherein Nature is *peremptory* (the reaſon whereof we cannot now ſtand to diſcuſs,) yet it is otherwiſe in things wherein nature admitteth a *latitude*. For he might ſee that a ſtrait glove will come more eaſily on with uſe; and that a wand will by uſe bend otherwiſe than it grew; and that by uſe of the voice we ſpeak louder and ſtronger; and that by uſe of enduring heat or cold, we endure it the better, and the like: which latter ſort have a nearer reſemblance unto that ſubject of manners he handleth, than thoſe inſtances which he allegeth. But allowing his Concluſion, *that virtues and vices conſiſt in habit*, he ought ſo much the more to have

taught the manner of ſuperinducing that habit: for there be many precepts of the wiſe ordering the exerciſes of the mind, as there is of ordering the exerciſes of the body; whereof we will recite a few.

The firſt ſhall be, that we beware we take not at the firſt either too *High* a ſtrain, or too *weak*: for if too *High*, in a diffident nature you diſcourage: in a confident nature you breed an opinion of facility, and ſo a ſloth; and in all natures you breed a further expectation than can hold out, and ſo an inſatisfaction on the end: if too weak of the other ſide, you may not look to perform and overcome any great taſk.

Another precept is, to practiſe all things chiefly at two ſeveral times, the one when the mind is beſt diſpoſed, the other when it is *worſt diſpoſed*; that by the one you may gain a great ſtep, by the other you may work out the knots and ſtonds of the mind, and make the middle times the more eaſy and pleaſant.

Another precept is, that which *Ariſtotle* mentioneth by the way, which is to bear ever towards the contrary extreme of that whereunto we are by Nature inclined; like unto the Rowing againſt the ſtream, or making a wand ſtraight by bending him contrary to his natural crookedneſs.

Another precept is, that the mind is brought to any thing better, and with more ſweetneſs and happineſs, if that whereunto you pretend be not firſt in the intention, but *Tanquam aliud agendo*,

becauſe of the Natural hatred of the mind againſt neceſſity and conſtraint. Many other Axioms there are touching the managing of *Exerciſe* and *cuſtom;* which being ſo conducted, doth prove indeed another nature; but being governed by chance, doth commonly prove but an ape of nature, and bringeth forth that which is lame and counterfeit.

So if we ſhould handle *books* and *ſtudies*, and what influence and operation they have upon manners, are there not divers precepts of great caution and direction appertaining thereunto? Did not one of the fathers in great indignation call *Poeſy*, *vinum Dæmonum*, becauſe it increaſeth temptations, perturbations, and vain opinions? Is not the opinion of *Ariſtotle* worthy to be regarded, wherein he ſaith, *That young men are no fit auditors of Moral Philoſophy, becauſe they are not ſettled from the boiling heat of their affections, nor attempered with Time and experience?* And doth it not hereof come, that thoſe excellent books and diſcourſes of the ancient writers, (whereby they have perſuaded unto *virtue* moſt effectually, by repreſenting her in *ſtate* and *Majeſty*, and *popular opinions* againſt virtue in their *Paraſites' Coats* fit to be ſcorned and derided,) are of ſo little effect towards honeſty of life, becauſe they are not read and revolved by men in their mature and ſettled years, but confined almoſt to boys and beginners? But is it not true alſo, that much leſs young men are fit auditors of Matters of Policy, till they have been thoroughly ſeaſoned in religion and Morality; leſt their Judg-

ments be corrupted, and made apt to think that there are no true Differences of things, but according to *utility* and *fortune*, as the verſe deſcribes it.

Proſperum et Felix ſcelus virtus vocatur:

and again,

Ille crucem pretium ſceleris tulit, Hic diadema:

which the Poets do ſpeak ſatirically, and in indignation on virtue's behalf; but books of policy do ſpeak it ſeriouſly and poſitively; for ſo it pleaſeth *Machiavel* to ſay, *That if Cæſar had been overthrown, he would have been more odious than ever was Catiline;* as if there had been no difference, but in fortune, between *a very fury of luſt and blood*, and *the moſt excellent ſpirit* (his ambition reſerved) *of the world?* Again, is there not a Caution likewiſe to be given of the doctrines of Moralities themſelves, (ſome kinds of them,) leſt they make men too preciſe, arrogant, incompatible; as *Cicero* ſaith of *Cato*, *In Marco Catone Hæc bona quæ videmus divina et egregia, ipſius ſcitote eſſe propria; quæ nonnunquam requirimus, ea ſunt omnia non a naturâ, ſed a Magiſtro?* Many other Axioms and advices there are touching thoſe proprieties and effects, which ſtudies do infuſe and inſtil into manners. And ſo likewiſe is there touching the uſe of all thoſe other points, of Company, fame, laws, and the reſt, which we recited in the beginning in the doctrine of Morality.

But there is a kind of *Culture* of the *Mind* that

ſeemeth yet more accurate and elaborate than the reſt, and is built upon this ground; that the minds of all men are at ſome times in a ſtate more perfect, and at other *times in a ſtate more depraved.* The purpoſe therefore of this practice is, to fix and cheriſh the good hours of the mind, and to obliterate and take forth the Evil. The fixing of the good hath been practiſed by two means, vows or conſtant reſolutions, and obſervances or exerciſes; which are not to be regarded ſo much in themſelves, as becauſe they keep the mind in continual obedience. The obliteration of the Evil hath been practiſed by two Means, ſome kind of Redemption or expiation of that which is paſt, and an Inception or account *de Novo*, for the time to come. But this part ſeemeth ſacred and religious, and juſtly; for all good Moral Philoſophy, as was ſaid, is but a handmaid to Religion.

Wherefore we will conclude with that laſt point, which is of all other means the moſt compendious and ſummary, and again, the moſt noble and effectual to the reducing of the mind unto virtue and good eſtate; which is, the electing and propounding unto a man's ſelf good and virtuous ends of his life, ſuch as may be in a reaſonable ſort within his compaſs to attain. For if theſe two things be ſuppoſed, that a man ſet before him honeſt and good ends, and again, that he be reſolute, conſtant, and true unto them; it will follow that he ſhall mould himſelf into all virtue at once. And this indeed is like the work of nature; whereas the

other courſe is like the work of the hand. For as when a carver makes an image, he ſhapes only that part whereupon he worketh, (as if he be upon *the face*, that part which ſhall be *the body* is but a rude ſtone ſtill, till ſuch time as he comes to it;) but, contrariwiſe, when Nature makes a *flower* or *living creature*, ſhe formeth rudiments of all the parts at one time: ſo in obtaining virtue by *habit*, while a man practiſeth Temperance, he doth not profit much to fortitude, nor the like: but when he dedicateth and applieth himſelf to *good ends*, look, what virtue ſoever the purſuit and paſſage towards thoſe ends doth commend unto him, he is inveſted of a precedent diſpoſition to conform himſelf thereunto. Which ſtate of mind *Ariſtotle* doth excellently expreſs himſelf, that it ought not to be called *virtuous*, but *Divine:* his words are theſe: *Immanitati autem conſentaneum eſt opponere eam, quæ ſupra humanitatem eſt, heroicam ſive divinam virtutem:* and a little after, *Nam ut feræ neque vitium neque virtus eſt, ſic neque Dei: Sed hic quidem ſtatus altius quiddam virtute eſt, ille aliud quiddam a vitio.* And therefore we may ſee what Celſitude of honour *Plinius Secundus* attributeth to *Trajan* in his funeral oration; where he ſaid, *That men needed to make no other prayers to the gods, but that they would continue as good Lords to them as Trajan had been;* as if he had not been only an Imitation of divine nature, but a pattern of it. But theſe be heathen and profane paſſages, having but a ſhadow of that divine ſtate of mind, which

Religion and the holy faith doth conduct men unto, by imprinting upon their ſouls *Charity*, which is excellently called the bond of *Perfection*, becauſe it comprehendeth and faſteneth all virtues together. And it is elegantly ſaid by *Menander* of vain love, which is but a falſe Imitation of divine love, *Amor melior Sophiſta Lævo ad humanam vitam*, that Love teacheth a man to carry himſelf better than the *Sophiſt* or *Preceptor;* which he calleth *Left-handed*, becauſe, with all his rules and precepts, he cannot form a man ſo *Dexterouſly*, nor with that facility to prize himſelf and govern himſelf, as love can do: ſo certainly, if a man's mind be truly inflamed with charity, it doth work him ſuddenly into greater perfection than all the Doctrine of morality can do, which is but a *Sophiſt* in compariſon of the other. Nay further, as *Xenophon* obſerved truly, that all other affections, though they raiſe the mind, yet they do it by diſtorting and uncomelineſs of ecſtaſies or exceſſes; but only Love doth exalt the mind, and nevertheleſs at the ſame inſtant doth ſettle and compoſe it: ſo in all other excellencies, though they advance nature, yet they are ſubject to exceſs; only Charity admitteth no *exceſs*. For ſo we ſee, aſpiring to be like GOD in power, the Angels tranſgreſſed and fell; *Aſcendam, et ero ſimilis altiſſimo:* by aſpiring to be like GOD in knowledge, man tranſgreſſed and fell; *Eritis ſicut Dii, ſcientes bonum et malum:* but by aſpiring to a ſimilitude of GOD in

goodneſs or love, neither Man nor Angel ever tranſgreſſed, or ſhall tranſgreſs. For unto that imitation we are called: *Diligite inimicos veſtros, Benefacite eis qui oderunt vos, et orate pro perſequentibus et calumniantibus vos, ut ſitis filii Patris veſtri qui in cœlis eſt, qui Solem ſuum oriri facit ſuper bonos et malos, et pluit ſuper juſtos et injuſtos.* So in the firſt platform of the divine Nature itſelf, the heathen Religion ſpeaketh thus, *Optimus Maximus:* and the ſacred Scriptures thus, *Miſericordia ejus ſuper omnia opera ejus.*

Wherefore I do conclude this part of Moral knowledge, concerning the *Culture and Regimen of the Mind;* wherein if any man, conſidering the parts thereof which I have enumerated, do judge that my labour is but to Collect into an *Art* or *Science* that which hath been pretermitted by others, as matter of common *Senſe and experience*, he judgeth well. But as *Philocrates* ſported with *Demoſthenes*, *You may not marvel, Athenians, that Demoſthenes and I do differ; for he drinketh water, and I drink wine;* and like as we read of an ancient parable of *the two gates of ſleep*,

> *Sunt geminæ ſomni portæ: quarum altera fertur*
> *Cornea, qua veris facilis datur exitus umbris:*
> *Altera Candenti perfecta nitens Elephanto,*
> *Sed falſa ad cœlum mittunt inſomnia manes:*

ſo if we put on ſobriety and attention, we ſhall find it a ſure Maxim in knowledge, that the more pleaſant Liquor *of Wine* is the more vaporous, and

the braver gate *of Ivory* ſendeth forth the falſer dreams.

But we have now concluded *that general part of Human Philoſophy, which contemplateth man ſegregate, and as he conſiſteth of body and ſpirit.* Wherein we may further note, that there ſeemeth to be a Relation or Conformity between the good of the mind and the good of the Body. For as we divided the good of the body into *Health*, *Beauty*, *Strength*, and *Pleaſure;* ſo the good of the mind, inquired in Rational and Moral knowledges, tendeth to this, to make the mind ſound, and without perturbation; *Beautiful*, and graced with decency; and *Strong* and *Agile* for all duties of life. Theſe three, as in the body, ſo in the mind, ſeldom meet, and commonly ſever. For it is eaſy to obſerve, that many have Strength of wit and Courage, but have neither Health from perturbations, nor any Beauty or decency in their doings: ſome again have an Elegancy and fineneſs of Carriage, which have neither ſoundneſs of honeſty, nor ſubſtance of ſufficiency: and ſome again have honeſt and reformed Minds, that can neither become themſelves nor manage Buſineſs: and ſometimes two of them meet, and rarely all three. As for pleaſure, we have likewiſe determined that the mind ought not to be reduced to ſtupidity, but to retain pleaſure; Confined rather in the ſubject of it, than in the ſtrength and vigour of it.

CIVIL Knowledge is converſant about a ſubject which of all others is moſt immerſed in matter, and hardlieſt reduced to Axiom. Nevertheleſs, as *Cato* the Cenſor ſaid, *That the Romans were like ſheep, for that a man might better drive a flock of them, than one of them; for in a flock, if you could but get ſome few to go right, the reſt would follow:* ſo in that reſpect Moral Philoſophy is more difficile than Policy. Again, moral Philoſophy propoundeth to itſelf the framing of internal goodneſs; but civil knowledge requireth only an External goodneſs; for that as to ſociety ſufficeth. And therefore it cometh oft to paſs that there be Evil Times in good governments: for ſo we find in the holy ſtory, when the kings were good, yet it is added, *Sed adhuc populus non dexerat cor ſuum ad Dominum Deum patrum ſuorum.* Again, States, as great Engines, move ſlowly, and are not ſo ſoon put out of frame: for as in *Egypt* the ſeven good years ſuſtained the ſeven bad, ſo governments, for a time well grounded, do bear out errors following; but the reſolution of particular perſons is more ſuddenly ſubverted. Theſe reſpects do ſomewhat qualify the extreme difficulty of civil knowledge.

This knowledge hath three parts, according to the three ſummary Actions of ſociety; which are Converſation, Negotiation, and Government. For man ſeeketh in ſociety comfort, uſe, and protec-

tion: and they be three wiſdoms of divers natures, which do often ſever: wiſdom of the behaviour, wiſdom of buſineſs, and wiſdom of ſtate.

The wiſdom of Converſation ought not to be over much affected, but much leſs deſpiſed; for it hath not only an honour in itſelf, but an influence alſo into buſineſs and government. The poet ſaith *Nec vultu deſtrue verba tuo:* a man may deſtroy the force of his words with his countenance: ſo may he of his deeds, ſaith *Cicero*, recommending to his brother affability and eaſy acceſs; *Nil intereſt habere oſtium apertum, vultum clauſum;* it is nothing won to admit men with an open door, and to receive them with a ſhut and reſerved countenance. So, we ſee, *Atticus*, before the firſt interview between *Cæſar* and *Cicero*, the war depending, did ſeriouſly adviſe *Cicero* touching the compoſing and ordering of his countenance and geſture. And if the government of the countenance be of ſuch effect, much more is that of the ſpeech, and other carriage appertaining to converſation; the true model whereof ſeemeth to me well expreſſed by *Livy*, though not meant for this purpoſe: *Ne aut arrogans videar, aut obnoxius; quorum alterum eſt alienæ libertatis obliti, alterum ſuæ: The ſum of behaviour is to retain a man's own dignity, without intruding upon the liberty of others.* On the other ſide, if behaviour and outward carriage be intended too much, firſt it may paſs into affectation, and then *Quid deformius quam Scenam in vitam transferre* (to act a man's life)? But al-

though it proceed not to that extreme, yet it conſumeth time, and employeth the mind too much. And therefore as we uſe to adviſe young ſtudents from company keeping, by ſaying, *Amici fures Temporis:* ſo certainly the Intending of the diſcretion of behaviour is a great Thief of Meditation. Again, ſuch as are accompliſhed in that form of urbanity pleaſe themſelves in it, and ſeldom aſpire to higher virtue; whereas thoſe that have defect in it do ſeek *Comelineſs* by Reputation; for where reputation is, almoſt every thing becometh; but where that is not, it muſt be ſupplied by *Punctilios*, and Compliments. Again, there is no greater impediment of Action than an over-curious obſervance of decency, and the guide of decency, which is Time and ſeaſon. For as *Solomon* ſaith, *Qui reſpicit ad ventos, non ſeminat; et qui reſpicit ad nubes, non metet:* a man muſt make his opportunity, as oft as find it. To conclude; Behaviour ſeemeth to me as a Garment of the Mind, and to have the Conditions of a Garment. For it ought to be made in faſhion; it ought not to be too curious; it ought to be ſhaped ſo as to ſet forth any good making of the mind, and hide any deformity; and above all, it ought not to be too ſtrait, or reſtrained for exerciſe or motion. But this part of Civil knowledge hath been elegantly handled, and therefore I cannot report it for deficient.

The wiſdom touching Negotiation or Buſineſs hath not been hitherto collected into writing, to the great derogation of learning, and the profeſſors

of learning. For from this root ſpringeth chiefly that note or opinion, which by us is expreſſed in Adage to this effect, that there is no great concurrence between learning and Wiſdom. For of the three wiſdoms which we have ſet down to pertain to civil life, for wiſdom of Behaviour, it is by learned men for the moſt part deſpiſed, as an Inferior to Virtue, and an Enemy to Meditation; for wiſdom of Government, they acquit themſelves well when they are called to it, but that happeneth to few; but for the wiſdom of Buſineſs, wherein man's life is moſt converſant, there be no Books of it, except ſome few ſcattered advertiſements, that have no proportion to the magnitude of this ſubject. For if books were written of this, as the other, I doubt not but learned men with mean experience, would far excel men of long experience without learning, and outſhoot them in their own bow.

Neither needeth it at all to be doubted, that this knowledge ſhould be ſo variable as it falleth not under precept; for it is much leſs infinite than ſcience of Government, which, we ſee, is laboured and in ſome part reduced. Of this wiſdom, it ſeemeth ſome of the ancient *Romans*, in the ſageſt and wiſeſt times, were profeſſors; for *Cicero* reporteth, that it was then in uſe for Senators that had name and opinion for general wiſe men, as *Coruncanius*, *Curius*, *Lælius*, and many others, to walk at certain hours in the *Place*, and to give audience to thoſe that would uſe their advice; and

that the particular Citizens would reſort unto them, and conſult with them of the marriage of a daughter, or of the employing of a ſon, or of a purchaſe or bargain, or of an accuſation, and every other occaſion incident to man's life. So as there is a wiſdom of Counſel and advice even in private Cauſes, ariſing out of a univerſal inſight into the affairs of the world; which is uſed indeed upon particular cauſes propounded, but is gathered by general obſervation of cauſes of like nature. For ſo we ſee in the book which *Q. Cicero* writeth to his brother. *De petitione conſulatus*, (being the only book of buſineſs that I know written by the ancients,) although it concerned a particular action then on foot, yet the ſubſtance thereof conſiſteth of many wiſe and politic axioms, which contain not a temporary, but a perpetual direction in the caſe of popular Elections. But chiefly we may ſee in thoſe Aphoriſms which have place among Divine writings, compoſed by *Solomon* the King, (of whom the Scriptures teſtify that his heart was as the ſands of the ſea, encompaſſing the world and all worldly matters,) we ſee, I ſay, not a few profound and excellent cautions, precepts, poſitions, extending to much variety of occaſions; whereupon we will ſtay awhile, offering to conſideration ſome number of Examples.

Sed et cunctis ſermonibus qui dicuntur ne accommodes aurem tuam, ne forte audias ſervum tuum maledicentem tibi. Here is concluded the provident ſtay of inquiry of that which we would be

loth to find: as it was judged great wiſdom in *Pompeius Magnus* that he burned *Sertorius's* papers unperuſed.

Vir ſapiens, ſi cum ſtulto contenderit, ſive iraſcatur, ſive rideat, non inveniet requiem. Here is deſcribed the great diſadvantage which a wiſe man hath in undertaking a lighter perſon than himſelf; which is ſuch an engagement as, whether a man turn the matter to jeſt, or turn it to heat, or howſoever he change copy, he can no ways quit himſelf well of it.

Qui delicatè a pueritia nutrit ſervum ſuum, poſtea ſentiet eum contumacem. Here is ſignified, that if a man begin too high a pitch in his favours, it doth commonly end in unkindneſs and unthankfulneſs.

Vidiſti virum velocem in opere ſuo? coram regibus ſtabit, nec erit inter ignobiles. Here is obſerved, that of all virtues for riſing to honour, quickneſs of deſpatch is the beſt; for ſuperiors many times love not to have thoſe they employ too deep or too ſufficient, but ready and diligent.

Vidi cunctos viventes qui ambulant ſub ſole, cum adoleſcente ſecundo qui conſurgit pro eo. Here is expreſſed that which was noted by *Sylla* firſt, and after him by *Tiberius; Plures adorant ſolem orientem quam occidentem vel meridianum.*

Si ſpiritus poteſtatem habentis aſcenderit ſuper te, locum tuum ne demiſeris; quia curatio faciet ceſſare peccata maxima. Here caution is given, that upon diſpleaſure, retiring is of all courſes the unfitteſt;

for a man leaveth things at worſt, and depriveth himſelf of means to make them better.

Erat Civitas parva, et pauci in ea viri: venit contra eam, rex magnus, et vadavit eam, inſtruxitque munitiones per Gyrum, et perfecta eſt obſidio; inventuſque eſt in ea vir pauper et ſapiens, et liberavit eam per ſapientiam ſuam; et nullus deinceps recordatus eſt hominis illius pauperis. Here the corruption of ſtates is ſet forth, that eſteem not virtue or merit longer than they have uſe of it.

Mollis reſponſio frangit iram. Here is noted that ſilence or rough Anſwer exaſperateth; but an anſwer preſent and temperate pacifieth.

Iter pigrorum quaſi ſepes ſpinarum. Here is lively repreſented how laborious ſloth proveth in the end; for when things are deferred till the laſt inſtant, and nothing prepared beforehand, every ſtep findeth a Brier or an impediment, which catcheth or ſtoppeth.

Melior eſt finis orationis quam principium. Here is taxed the vanity of formal ſpeakers, that ſtudy more about prefaces and inducements, than upon the concluſions and iſſues of ſpeech.

Qui cognoſcit in judicio faciem, non bene facit; iſte et pro bucella panis deſeret veritatem. Here is noted, that a judge were better be a briber than a reſpecter of perſons; for a corrupt judge offendeth not ſo highly as a facile.

Vir pauper calumnians pauperes ſimilis eſt imbri vehementi, in quo paratur fames. Here is expreſſed the extremity of neceſſitous extortions,

figured in the ancient fable of the full and the hungry horſeleech.

Fons turbatus pede, et vena corrupta, eſt juſtus cadens coram impio. Here is noted, that one judicial and exemplar iniquity in the face of the world, doth trouble the fountains of Juſtice more than many particular Injuries paſſed over by connivance.

Qui ſubtrahit aliquid a patre et a matre, et dicit hoc non eſſe peccatum, particeps eſt homicidii. Here is noted, that whereas men in wronging their beſt friends uſe to extenuate their fault, as if they might preſume or be bold upon them, it doth contrariwiſe indeed aggravate their fault, and turneth it from Injury to impiety.

Noli eſſe amicus homini iracundo, nec ambulato cum homine furioſo. Here caution is given, that in the election of our friends we do principally avoid thoſe which are impatient, as thoſe that will eſpouſe us to many factions and quarrels.

Qui conturbat domum ſuam, poſſidebit ventum. Here is noted, that in domeſtical ſeparations and breaches men do promiſe to themſelves quieting of their mind and contentment; but ſtill they are deceived of their expectation, and it turneth to wind.

Filius ſapiens lætificat patrem: filius vero ſtultus mœſtitia eſt matri ſuæ. Here is diſtinguiſhed, that fathers have moſt comfort of the good proof of their ſons; but mothers have moſt diſcomfort

of their ill proof, becauſe women have little diſcerning of virtue, but of fortune.

Qui celat delictum, quærit amicitiam; ſed qui altero ſermone repetit, ſeparat fœderatos. Here caution is given, that reconcilement is better managed by an *Amneſty*, and paſſing over that which is paſt, than by Apologies and excuſations.

In omni opere bono erit abundantia; ubi autem verba ſunt plurima, ibi frequenter egeſtas. Here is noted, that words and diſcourſe abound moſt where there is idleneſs and want.

Primus in ſua cauſa juſtus; ſed venit altera pars, et inquirit in eum. Here is obſerved, that in all cauſes the firſt tale poſſeſſeth much; in ſuch ſort, that the prejudice thereby wrought will be hardly removed, except ſome abuſe or falſity in the Information be detected.

Verba bilinguis quaſi ſimplicia, et ipſa perveniunt ad interiora ventris. Here is diſtinguiſhed, that flattery and inſinuation, which ſeemeth ſet and artificial, ſinketh not far; but that entereth deep which hath ſhew of nature, liberty, and ſimplicity.

Qui erudit deriſorem, ipſe ſibi injuriam facit; et qui arguit Impium, cibi maculam generat. Here caution is given how we tender reprehenſion to arrogant and ſcornful natures, whoſe manner is to eſteem it for contumely, and accordingly, to return it.

Da ſapienti occaſionem, et addetur ei ſapientia.

Here is diſtinguiſhed the wiſdom brought into habit, and that which is but verbal, and ſwimming only in conceit; for the one upon occaſion preſented is quickened and redoubled, the other is amazed and confuſed.

Quomodo in aquis reſplendent vultus proſpicientium, ſic corda hominum manifeſta ſunt prudentibus. Here the mind of a wiſe man is compared to a glaſs, wherein the Images of all diverſity of Natures and Cuſtoms are repreſented; from which repreſentation proceedeth that application,

Qui ſapit, innumeris moribus aptus erit.

Thus have I ſtaid ſomewhat longer upon theſe ſentences politic of *Solomon* than is agreeable to the proportion of an example; led with a deſire to give authority to this part of knowledge, which I noted as deficient, by ſo excellent a precedent; and have alſo attended them with brief obſervations, ſuch as to my underſtanding offer no violence to the ſenſe, though I know they may be applied to a more divine uſe: but it is allowed, even in divinity, that ſome interpretations, yea, and ſome writings, have more of the *Eagle* than others; but taking them as Inſtructions for life, they might have received large diſcourſe, if I would have broken them and illuſtrated them by deducements and examples.

Neither was this in uſe only with the *Hebrews*, but it is generally to be found in the wiſdom of the more ancient Times; that as men found out

any obſervation that they thought was good for life, they would gather it, and expreſs it in parable, or Aphoriſm, or fable. But for fables, they were vicegerents and ſupplies where Examples failed: now that the times abound with hiſtory, the aim is better when the mark is alive. And therefore the form of writing which of all others is fitteſt for this variable argument of Negotiation and occaſion is that which *Machiavel* choſe wiſely and aptly for Government; *namely*, *diſcourſe upon Hiſtories or Examples:* for knowledge drawn freſhly, and in our view, out of particulars, knoweth the way beſt to particulars again; and it hath much greater life for practice when the diſcourſe attendeth upon the Example, than when the example attendeth upon the diſcourſe. For this is no point of order, as it ſeemeth at firſt, but of ſubſtance: for when the Example is the ground, being ſet down in a hiſtory at large, it is ſet down with all circumſtances, which may ſometimes control the diſcourſe thereupon made, and ſometimes ſupply it as a very pattern for action; whereas the Examples alleged for the diſcourſe's ſake are cited ſuccinctly, and without particularity, and carry a ſervile aſpect toward the diſcourſe which they are brought in to make good.

But this difference is not amiſs to be remembered, that as hiſtory of *Times* is the beſt ground for diſcourſe of Government, ſuch as *Machiavel* handleth, ſo hiſtory of Lives is the moſt proper for diſcourſe of buſineſs, becauſe it is moſt conver-

ſant in private Actions. Nay, there is a ground of diſcourſe for this purpoſe fitter than them both, which is *diſcourſe upon letters*, ſuch as are wiſe and weighty, as many are of *Cicero ad Atticum*, and others. For letters have a great and more particular repreſentation of buſineſs than either *Chronicles* or *Lives*. Thus have we ſpoken both of the matter and form of this part of Civil knowledge, touching Negotiation, which we note to be deficient.

But yet there is another part of this part, which differeth as much from that whereof we have ſpoken as *ſapere* and *ſibi Sapere*, the one moving as it were to the circumference, the other to the centre. For there is a wiſdom of counſel, and again there is a wiſdom of preſſing a man's own fortune; and they do ſometimes meet, and often ſever; for many are wiſe in their own ways that are weak for government or Counſel; like Ants, which are wiſe creatures for themſelves, but very hurtful for the garden. This wiſdom the *Romans* did take much knowledge of: *Nam pol ſapiens*, ſaith the Comical Poet, *fingit fortunam ſibi;* and it grew to an adage, *Faber quiſque fortunæ propriæ;* and *Livy* attributeth it to *Cato* the firſt, *in hoc viro tanta vis animi et ingenii inerat, ut quocunque loco natus eſſet, ſibi ipſe fortunam facturus videretur.*

This conceit or poſition, if it be too much declared and profeſſed, hath been thought a thing impolitic and unlucky, as was obſerved in *Timotheus* the *Athenian* who having done many great ſervices

to the Eſtate in his government, and giving an account thereof to the people, as the manner was, did conclude every particular with this Clauſe, And in this fortune had no part. And it came ſo to paſs that he never proſpered in any thing he took in hand afterwards: for this is too high and too arrogant ſavouring of that which *Ezekiel* ſaith of *Pharaoh*, *Dicis*, *Fluvius eſt meus*, *et ego feci memet ipſum:* or of that which another Prophet ſpeaketh, that men offer Sacrifices to their nets and ſnares; and that which the Poet expreſſeth,

> *Dextra mihi Deus, et telum quod inutile libro,*
> *Nunc adſint!*

for theſe confidences were ever unhallowed, and unbleſſed: and therefore thoſe that were great Politicians indeed ever aſcribed their ſucceſſes to their felicity, and not to their ſkill or virtue. For ſo *Sylla* ſurnamed himſelf *Felix*, not *Magnus:* ſo *Cæſar* ſaid to the Maſter of the ſhip, *Cæſarem portas et fortunam ejus.*

But yet nevertheleſs theſe Poſitions, *Faber quiſque fortunæ ſuæ: Sapiens dominabitur aſtris: Invia virtuti nulla eſt via*, and the like, being taken and uſed as ſpurs to induſtry, and not as ſtirrups to inſolency, rather for reſolution than for preſumption or outward declaration, have been ever thought ſound and good; and are, no queſtion, imprinted in the greateſt minds, who are ſo ſenſible of this opinion, as they can ſcarce contain it within: as we ſee in *Auguſtus Cæſar*, (who was rather diverſe

from his uncle, than inferior in virtue,) how when he died, he deſired his friends about him to give him a *Plaudite*, as if he were conſcious to himſelf that he had played his part well upon the ſtage. This part of knowledge we do report alſo as deficient: not but that it is practiſed too much, but it hath not been reduced to writing. And therefore leſt it ſhould ſeem to any that it is not comprehenſible by Axiom, it is requiſite, as we did in the former, that we ſet down ſome heads or paſſages of it.

Wherein it may appear at the firſt a new and unwonted Argument to teach men how to raiſe and make their fortune; a doctrine wherein every man perchance will be ready to yield himſelf a diſciple, till he ſeeth difficulty: for fortune layeth as heavy impoſitions as *virtue;* and it is as hard and ſevere a thing to be a true *Politician*, as to be truly *moral.* But the handling hereof concerneth learning greatly, both in honour and in ſubſtance: in honour, becauſe pragmatical men may not go away with an opinion that learning is like a Lark, that can mount, and ſing, and pleaſe herſelf, and nothing elſe; but may know that ſhe holdeth as well of the Hawk, that can ſoar aloft, and can alſo deſcend and ſtrike upon the prey: in ſubſtance, becauſe it is the perfect law of inquiry of truth, *that nothing be in the globe of matter, which ſhould not be likewiſe in the globe of Cryſtal, or Form;* that is, that there be not any thing in being and action, which ſhould not be drawn and collected into con-

templation and doctrine. Neither doth learning admire or esteem of this Architecture of fortune, otherwise than as of an inferior work: for no man's fortune can be an end worthy of his being; and many times the worthiest men do abandon their fortune willingly for better respects: but nevertheless fortune, as an organ of virtue and merit, deserveth the consideration.

First therefore the precept which I conceive to be most summary towards the prevailing in fortune, is to obtain that window which *Momus* did require: who seeing in the frame of man's heart such angles and receſſes, found fault that there was not a window to look into them; that is, to procure good informations of particulars touching persons, their natures, their desires and ends, their customs and fashions, their helps and advantages, and whereby they chiefly stand: so again their weaknesses and disadvantages, and where they lie most open and obnoxious; their friends, factions, and dependencies; and again their oppositeſ, enviers, competitors, their moods and times, *Sola viri molles aditus et tempora noras;* their principles, rules, and observations, and the like: and this not only of persons, but of actions; what are on foot from time to time, and how they are conducted, favoured, opposed, and how they import, and the like. For the knowledge of present Actions is not only material in itself, but without it also the knowledge of persons is very erroneous: for men change with the actions; and whilst they are in pursuit

they are one, and when they return to their Nature they are another. Theſe Informations of particulars, touching perſons and actions, are as the *minor* propoſitions in every active ſyllogiſm; for no excellency of obſervations, which are as the *major* propoſitions, can ſuffice to ground a concluſion, if there be error and miſtaking in the minors.

That this knowledge is poſſible, *Solomon* is our ſurety; who ſaith, *Conſilium in corde viri tanquam aqua profunda; ſed vir prudens exhauriet illud.* And although the knowledge itſelf falleth not under precept, becauſe it is of Individuals, yet the inſtructions for the obtaining of it may.

We will begin therefore with this precept, according to the ancient opinion, that the Sinews of wiſdom are ſlowneſs of belief and diſtruſt; that more truſt be given to Countenances and Deeds than to words: and in words rather to ſudden paſſages and ſurpriſed words than to ſet and purpoſed words. Neither let that be feared which is ſaid, *fronti nulla fides:* which is meant of a general outward behaviour, and not of the private and ſubtile motions and labours of the countenance and geſture; which as *Q. Cicero* elegantly ſaith, is *Animi Janua, the gate of the Mind.* None more cloſe than *Tiberius*, and yet *Tacitus* ſaith of *Gallus*, *Etenim vultu offenſionem conjectaverat.* So again, noting the differing Character and manner of his commending *Germanicus* and *Druſus* in the *Senate*, he ſaith, touching his faſhion wherein he carried his

ſpeech of *Germanicus*, thus; *Magis in ſpeciem adornatis verbis, quam ut penitus ſentire crederetur:* but of *Druſus* thus; *Paucioribus, ſed intentior, et fida oratione:* and in another place, ſpeaking of his character of ſpeech, when he did any thing that was gracious and popular, he ſaith, that in other things he was *velut eluctantium verborum;* but then again, *Solutius vero loquebatur quando ſubveniret.* So that there is no ſuch artificer of diſſimulation, nor no ſuch commanded countenance, *vultus juſſus*, that can ſever from a feigned tale ſome of theſe faſhions, either a more ſlight and careleſs faſhion, or more ſet and formal, or more tedious and wandering, or coming from a man more drily and hardly.

Neither are *Deeds* ſuch aſſured pledges, as that they may be truſted without a judicious conſideration of their magnitude and nature: *Fraus ſibi in parvis fidem præſtruit, ut majore emolumento fallat:* and the *Italian* thinketh himſelf upon the point to be bought and ſold, when he is better uſed than he was wont to be, without manifeſt cauſe. For ſmall favours, they do but lull men aſleep, both as to *Caution* and as to *Induſtry;* and are, as *Demoſthenes* calleth them, *Alimenta ſocordiæ.* So again we ſee how falſe the nature of ſome *deeds* are, in that particular which *Mutianus* practiſed upon *Antonius Primus*, upon that hollow and unfaithful reconcilement which was made between them; whereupon *Mutianus* advanced many of the friends of *Antonius: Simul amicis ejus præfec-*

turas et tribunatus largitur: wherein, under pretence to ſtrengthen him, he did deſolate him, and won from him his dependences.

As for *Words*, though they be like waters to Phyſicians, full of flattery and uncertainty, yet they are not to be deſpiſed, eſpecially with the advantage of paſſion and affection. For ſo we ſee *Tiberius*, upon a ſtinging and incenſing ſpeech of *Agrippina*, came a ſtep forth of his diſſimulation, when he ſaid, *You are hurt, becauſe you do not reign;* of which *Tacitus* ſaith, *Audita hæc raram occulti pectoris vocem elicuere; correptamque Græco verſu admonuit, ideo lædi, quia non regnaret.* And therefore the Poet doth elegantly call paſſions, tortures, that urge men to confeſs their ſecrets:

Vino tortus et ira.

And experience ſheweth, there are few men ſo true to themſelves and ſo ſettled, but that, ſometimes upon heat, ſometimes upon bravery, ſometimes upon kindneſs, ſometimes upon trouble of mind and weakneſs, they open themſelves; eſpecially if they be put to it with a counter-diſſimulation, according to the proverb of *Spain*, *Di mentira, y ſacaras verdad (Tell a lie and find a truth).*

As for the knowing of men, which is at ſecond hand from Reports; men's weakneſſes and faults are beſt known from their Enemies, their virtues and abilities from their friends, their cuſtoms and Times from their ſervants, their conceits and opi-

nions from their familiar friends, with whom they diſcourſe moſt. General fame is light, and the opinions conceived by ſuperiors or equals are deceitful; for to ſuch, men are more maſked: *Verior fama e domeſticis emanat.*

But the ſoundeſt diſcloſing and expounding of men is by their natures and ends, wherein the weakeſt ſort of men are beſt interpreted by their Natures, and the wiſeſt by their ends. For it was both pleaſantly and wiſely ſaid, though I think very untruly, by a Nuncio of the Pope, returning from a certain Nation where he ſerved as *Lieger;* whoſe opinion being aſked touching the appointment of one to go in his place, he wiſhed that in any caſe they did not ſend one that was too wiſe; becauſe no very wiſe man would ever imagine what they in that country were like to do. And certainly it is an error frequent for men to ſhoot over, and to ſuppoſe deeper ends, and more compaſs-reaches than are: the *Italian* proverb being elegant, and for the moſt part true:

Di danari, di ſenno, e di fede,
C'e ne manco che non credi.

(There is commonly leſs money, leſs wiſdom, and leſs good faith than men do account upon.)

But Princes, upon a far other reaſon, are beſt interpreted by their natures, and private perſons by their ends; for Princes being at the top of human deſires, they have for the moſt part no particular ends whereto they aſpire, by diſtance from which

a man might take meaſure and ſcale of the reſt of their actions and deſires; which is one of the cauſes that maketh their hearts more inſcrutable. Neither is it ſufficient to inform ourſelves in men's ends and natures, of the variety of them only, but alſo of the predominancy, what humour reigneth moſt, and what end is principally ſought. For ſo weſ ee, when *Tigellinus* ſaw himſelf outſtripped by *Petronius Turpilianus* in *Nero's* humours of pleaſures, *Metus ejus rimatur* (he wrought upon *Nero's* fears), whereby he brake the other's neck.

But to all this part of Inquiry the moſt compendious way reſteth in three things: the firſt, to have general acquaintance and inwardneſs with thoſe which have general acquaintance and look moſt into the world; and eſpecially according to the diverſity of Buſineſs, and the diverſity of perſons, to have privacy and converſation with ſome one friend, at leaſt, which is perfect and well intelligenced in every ſeveral kind. The ſecond is, to keep a good mediocrity in liberty of ſpeech and ſecrecy; in moſt things liberty: ſecrecy where it importeth; for liberty of ſpeech inviteth and provoketh liberty to be uſed again, and ſo bringeth much to a man's knowledge; and ſecrecy, on the other ſide, induceth truſt and inwardneſs. The laſt is, the reducing of a man's ſelf to this watchful and ſerene habit, as to make account and purpoſe, in every conference and action, as well to obſerve as to act. For as *Epictetus* would have a Philoſopher in every particular action to ſay to himſelf, *Et hoc volo, et etiam inſti-*

tutum ſervare; ſo a politic man in every thing ſhould ſay to himſelf, *Et hoc volo, ac etiam aliquid addiſcere.* I have ſtayed the longer upon this precept of obtaining good information, becauſe it is a main part by itſelf, which anſwereth to all the reſt. But, above all things, Caution muſt be taken that men have a good ſtay and hold of themſelves, and that this much knowledge do not draw on much meddling; for nothing is more unfortunate than light and raſh intermeddling in many matters. So that this variety of knowledge tendeth in concluſion but only to this, to make a better and freer choice of thoſe actions which may concern us, and to conduct them with the leſs error and the more dexterity.

The ſecond precept concerning this knowledge is, for men to take good information touching their own perſon, and well to underſtand themſelves: knowing that, as St. *James* ſaith, though men look oft in a glaſs, yet they do ſuddenly forget themſelves; wherein as the divine glaſs is the word of God, ſo the politic glaſs is the ſtate of the world, or times wherein we live, in the which we are to behold ourſelves.

For men ought to take an impartial view of their own abilities and virtues; and again of their wants and impediments; accounting theſe with the moſt, and thoſe other with the leaſt; and from this view and examination to frame the conſiderations following.

Firſt, to conſider how the conſtitution of their

nature ſorteth with the general ſtate of the times; which if they find agreeable and fit, then in all things to give themſelves more ſcope and liberty; but if differing and diſſonant, then in the whole courſe of their life to be more cloſe, retired, and reſerved: as we ſee in *Tiberius*, who was never ſeen at a play, and came not into the Senate in twelve of his laſt years; whereas *Auguſtus Cæſar* lived ever in men's eyes, which *Tacitus* obſerveth, *Alia Tiberio morum via.*

Secondly, to conſider how their Nature ſorteth with profeſſions and courſes of life, and accordingly to make election, if they be free; and, if engaged, to make the departure at the firſt opportunity: as we ſee was done by Duke *Valentine*, that was deſigned by his father to a ſacerdotal profeſſion, but quitted it ſoon after in regard of his parts and inclination; being ſuch, nevertheleſs, as a man cannot tell well whether they were worſe for a Prince or for a Prieſt.

Thirdly, to conſider how they ſort with thoſe whom they are like to have Competitors and Concurrents; and to take that courſe wherein there is moſt ſolitude, and themſelves like to be moſt eminent: as *Julius Cæſar* did, who at firſt was an Orator or Pleader; but when he ſaw the excellency of *Cicero*, *Hortenſius*, *Catulus*, and others, for eloquence, and ſaw there was no man of reputation for the wars but *Pompeius*, upon whom the State was forced to rely, he forſook his courſe begun toward a civil and popular greatneſs, and tranſferred his deſigns to a martial greatneſs.

Fourthly, in the choice of their friends and dependences, to proceed according to the Compoſition of their own nature: as we may ſee in *Cæſar;* all whoſe friends and followers were men active and effectual, but not ſolemn, or of reputation.

Fifthly, to take ſpecial heed how they guide themſelves by examples, in thinking they can do as they ſee others do; whereas perhaps their natures and carriages are far differing. In which Error it ſeemeth *Pompey* was, of whom *Cicero* ſaith, that he was wont often to ſay, *Sylla potuit, ego non potero?* Wherein he was much abuſed, the natures and proceedings of himſelf and his example being the unlikeſt in the world; the one being fierce, violent, and preſſing the fact; the other ſolemn, and full of Majeſty and circumſtance, and therefore the leſs effectual.

But this precept touching the politic knowledge of ourſelves, hath many other branches, whereupon we cannot inſiſt.

Next to the well underſtanding and diſcerning of a man's ſelf, there followeth the well opening and revealing a man's ſelf; wherein we ſee nothing more uſual than for the more able man to make the leſs ſhew. For there is a great advantage in the well ſetting forth of a man's virtues, fortunes, merits; and again, in the artificial covering of a man's weakneſſes, defects, diſgraces; ſtaying upon the one, ſliding from the other; cheriſhing the one by circumſtances, gracing the other by expoſition, and the like: wherein we ſee what *Tacitus* ſaith of *Mutianus*, who was the greateſt politician of his

time, *Omnium quæ dixerat feceratque arte quâdam oſtentator:* which requireth indeed ſome art, leſt it turn tedious and arrogant; but yet ſo, as oſtentation, though it be to the firſt degree of vanity, ſeemeth to me rather a vice in Manners than in Policy: for as it is ſaid, *Audacter calumniare, ſemper aliquid hæret:* ſo, except it be in a ridiculous degree of deformity, *Audacter te vendita, ſemper aliquid hæret.* For it will ſtick with the more ignorant and inferior ſort of men, though men of wiſdom and rank do ſmile at it, and deſpiſe it; and yet the authority won with many doth countervail the diſdain of a few. But if it be carried with decency and government, as with a natural, pleaſant, and ingenious faſhion; or at times when it is mixed with ſome peril and unſafety, as in Military perſons; or at times when others are moſt envied; or with eaſy and careleſs paſſage to it and from it, without dwelling too long, or being too ſerious; or with an equal freedom of taxing a man's ſelf, as well as gracing himſelf; or by occaſion of repelling or putting down others' injury or inſolence; it doth greatly add to reputation: and ſurely not a few ſolid natures, that want this ventoſity, and cannot ſail in the height of the winds, are not without ſome prejudice and diſadvantage by their moderation.

But for theſe flouriſhes and enhancements of virtue, as they are not perchance unneceſſary, ſo it is at leaſt neceſſary that virtue be not diſvalued and imbaſed under the juſt price; which is done

in three manners: by offering and obtruding a man's ſelf; wherein men think he is rewarded, when he is accepted; by doing too much, which will not give that which is well done leave to ſettle, and in the end induceth ſatiety; and by finding too ſoon the fruit of a man's virtue, in commendation, applauſe, honour, favour; wherein if a man be pleaſed with a little, let him hear what is truly ſaid; *Cave ne inſuetus rebus majoribus videaris, ſi hæc te res parva ſicuti magna delectat.*

But the covering of defects is of no leſs importance than the valuing of good parts; which may be done likewiſe in three manners, by *Caution*, by *Colour*, and by *Confidence*. *Caution* is when men do ingeniouſly and diſcreetly avoid to be put into thoſe things for which they are not proper: whereas, contrariwiſe, bold and unquiet ſpirits will thruſt themſelves into matters without difference, and ſo publiſh and proclaim all their wants. *Colour* is, when men make a way for themſelves, to have a conſtruction made of their faults or wants, as proceeding from a better cauſe, or intended for ſome other purpoſe: for of the one it is well ſaid,

Sæpe latet vitium proximitate boni,

and therefore whatſoever want a man hath, he muſt ſee that he pretend the virtue that ſhadoweth it; as if he be *Dull*, he muſt affect *Gravity;* if a *Coward*, *Mildneſs;* and ſo the reſt: for the ſecond, a man muſt frame ſome probable cauſe why he ſhould not do his beſt, and why he ſhould diſſem-

ble his abilities; and for that purpoſe muſt uſe to diſſemble thoſe abilities which are notorious in him, to give colour that his true wants are but induſtries and diſſimulations. For *Confidence*, it is the laſt but ſureſt remedy; namely, to depreſs and ſeem to deſpiſe whatſoever a man cannot attain; obſerving the good principle of the Merchants, who endeavour to raiſe the price of their own commodities, and to beat down the price of others. But there is a confidence that paſſeth this other; which is, to face out a man's own defects, in ſeeming to conceive that he is beſt in thoſe things wherein he is failing; and, to help that again, to ſeem on the other ſide that he hath leaſt opinion of himſelf in thoſe things wherein he is beſt: like as we ſhall ſee it commonly in Poets, that if they ſhew their verſes, and you except to any, they will ſay, *that that line coſt them more labour than any of the reſt;* and preſently will ſeem to diſable and ſuſpect rather *ſome other line*, which they know well enough to be the beſt in the number. But above all, in this righting and helping of a man's ſelf in his own carriage, he muſt take heed he ſhew not himſelf diſmantled, and expoſed to ſcorn and injury, by too much dulceneſs, goodneſs, and facility of nature; but ſhew ſome ſparkles of liberty, ſpirit, and edge: which kind of fortified carriage, with a ready reſcuing of a man's ſelf from ſcorns, is ſometimes of neceſſity impoſed upon men by ſomewhat in their perſon or fortune; but it ever ſucceedeth with good felicity.

Another precept of this knowledge is, by all poſſible endeavour to frame the mind to be pliant and obedient to occaſion; for nothing hindereth men's fortunes ſo much as this: *Idem manebat, neque idem decebat*, men are where they were, when occaſions turn: and therefore to *Cato*, whom *Livy* maketh ſuch an Architect of fortune, he addeth, that he had *Verſatile Ingenium*. And thereof it cometh that theſe grave ſolemn wits, which muſt be like themſelves, and cannot make departures, have more dignity than felicity. But in ſome it is nature to be ſomewhat vicious and inwrapped, and not eaſy to turn; in ſome it is a conceit, that is almoſt a nature, which is, that men can hardly make themſelves believe that they ought to change their courſe, when they have found good by it in former experience. For *Machiavel* noted wiſely, how *Fabius Maximus* would have been temporizing ſtill, according to his old bias, when the nature of the war was altered and required hot purſuit. In ſome other it is want of point and penetration in their judgment, that they do not diſcern when things have a period, but come in too late after the occaſion; as *Demoſthenes* compareth the people of *Athens* to country fellows, when they play in a fence ſchool, that if they have a blow, then they remove their weapon to that ward, and not before. In ſome other it is a lothneſs to loſe labours paſſed, and a conceit that they can bring about occaſions to their ply; and yet in the end, when they ſee no other remedy, then they

come to it with disadvantage; as *Tarquinius*, that gave for the third part of *Sibylla's* books the treble price, when he might at first have had all three for the simple. But from whatsoever root or cause this Restiveness of mind proceedeth, it is a thing most prejudicial; and nothing is more politic than to make the wheels of our mind concentric and voluble with the wheels of fortune.

Another precept of this knowledge, which hath some affinity with that we last spake of, but with difference, is that which is well expressed, *Fatis accede Deisque*, that men do not only turn with the occasions, but also run with the occasions, and not strain their credit or strength to over hard or extreme points; but choose in their actions that which is most passable: for this will preserve men from foil, not occupy them too much about one matter, win opinion of moderation, please the most, and make a shew of a perpetual felicity in all they undertake; which cannot but mightily increase reputation.

Another part of this knowledge seemeth to have some repugnancy with the former two, but not as I understand it; and it is that which *Demosthenes* uttereth in high terms; *Et quemadmodum receptum est, ut exercitum ducat Imperator, sic et a cordatis viris res ipsæ ducendæ; ut quæ ipsis videntur, ea gerantur, et non ipsi eventus tantum persequi cogantur.* For, if we observe, we shall find two differing kinds of sufficiency in managing of business: some can make use of occasions aptly and dexter-

ouſly, but plot little; ſome can urge and purſue their own plots well, but cannot accommodate nor take in; either of which is very imperfect without the other.

Another part of this knowledge is the obſerving a good mediocrity in the declaring, or not declaring a man's ſelf: for although depth of ſecrecy, and making way, *qualis eſt via navis in Mari*, (which the *French* calleth *Sourdes Menées*, when men ſet things in work without opening themſelves at all,) be ſometimes both proſperous and admirable; yet many times *Diſſimulatio errores parit, qui diſſimulatorem ipſum illaqueant;* and therefore, we ſee the greateſt politicians have in a natural and free manner profeſſed their deſires, rather than been reſerved and diſguiſed in them: for ſo we ſee that *Lucius Sylla* made a kind of profeſſion, *that he wiſhed all men happy or unhappy, as they ſtood his friends or enemies.* So *Cæſar*, when he went firſt into *Gaul*, made no ſcruple to profeſs *that he had rather be firſt in a village, than ſecond at Rome.* So again, as ſoon as he had begun the war, we ſee what *Cicero* ſaith of him, *Alter* (meaning of *Cæſar*) *non recuſat, ſed quodammodo poſtulat, ut, ut eſt, ſic appelletur Tyrannus.* So we may ſee in a Letter of *Cicero* to *Atticus*, that *Auguſtus Cæſar*, in his very entrance into affairs, when he was a darling of the Senate, yet in his harangues to the people would ſwear, *Ita parentis honores conſequi liceat*, which was no leſs than the Tyranny; ſave that, to help it, he would ſtretch forth his hand towards a

Statue of *Cæsar's* that was erected in the place: whereat many men laughed, and wondered, and said, Is it possible? or, Did you ever hear the like to this? and yet thought he meant no hurt; he did it so handsomely and ingenuously. And all these were prosperous: whereas *Pompey*, who tended to the same end, but in a more dark and dissembling manner, as *Tacitus* saith of him, *Occultior, non melior*, wherein *Sallust* concurreth, *ore probo, animo inverecundo*, made it his design, by infinite secret Engines, to cast the state into an absolute Anarchy and confusion, that the state might cast itself into his Arms for necessity and protection, and so the sovereign power be put upon him, and he never seen in it: and when he had brought it, as he thought, to that point, when he was chosen *Consul* alone, as never any was, yet he could make no great matter of it, because men understood him not; but was fain, in the end, to go the beaten track of getting Arms into his hands, by colour of the doubt of *Cæsar's* designs: so tedious, casual, and unfortunate are these deep dissimulations: whereof, it seemeth, *Tacitus* made his judgment, that they were a cunning of an inferior form in regard of true policy; attributing the one to *Augustus*, the other to *Tiberius;* where, speaking of *Livia*, he saith, *Et cum artibus mariti simulatione filii bene composita:* for surely the continual habit of dissimulation is but a weak and sluggish cunning, and not greatly politic.

Another precept of this Architecture of Fortune

is, to accuſtom our minds to judge of the proportion or value of things, as they conduce and are material to our particular ends: and that to do ſubſtantially, and not ſuperficially. For we ſhall find the Logical part, as I may term it, of ſome men's minds good, but the Mathematical part erroneous; that is, they can well judge of conſequences, but not of proportions and compariſons, preferring things of ſhew and ſenſe before things of ſubſtance and effect. So ſome fall in love with acceſs to Princes, others with popular fame and applauſe, ſuppoſing they are things of great purchaſe: when in many Caſes they are but matters of Envy, peril, and Impediment.

So ſome meaſure things according to the labour and difficulty, or aſſiduity, which are ſpent about them; and think, if they be ever moving, that they muſt needs advance and proceed; as *Cæſar* ſaith in a deſpiſing manner of *Cato* the ſecond, when he deſcribeth how laborious and indefatigable he was to no great purpoſe; *Hæc omnia magno ſtudio agebat.* So in moſt things men are ready to abuſe themſelves in thinking the greateſt means to be beſt, when it ſhould be the Fitteſt.

As for the true marſhalling of men's purſuits towards their fortune, as they are more or leſs material, I hold them to ſtand thus: firſt the amendment of their own Minds; for the Remove of the Impediments of the mind will ſooner clear the paſſages of fortune, than the obtaining fortune will remove the Impediments of the mind. In the

ſecond place I ſet down wealth and means; which I know moſt men would have placed firſt, becauſe of the general uſe which it beareth towards all variety of occaſions: but that opinion I may condemn with like reaſon as *Machiavel* doth that other, that moneys were the ſinews of the wars; whereas, ſaith he, the true ſinews of the wars are the ſinews of men's Arms, that is, a valiant, populous, and Military Nation: and he voucheth aptly the authority of *Solon*, who, when *Crœſus* ſhewed him his treaſury of gold, ſaid to him, that if another came that had better Iron, he would be Maſter of his Gold. In like manner it may be truly affirmed, that it is not moneys that are the ſinews of fortune, but it is the ſinews and ſteel of men's Minds, Wit, Courage, Audacity, Reſolution, Temper, Induſtry, and the like. In the third place I ſet down Reputation, becauſe of the peremptory Tides and Currents it hath; which, if they be not taken in their due time, are ſeldom recovered, it being extreme hard to play an after game of reputation. And laſtly, I place honour, which is more eaſily won by any of the other three, much more by all, than any of them can be purchaſed by honour. To conclude this precept, as there is order and priority in Matter, ſo is there in Time, the prepoſterous placing whereof is one of the commoneſt Errors: while men fly to their ends when they ſhould intend their beginnings, and do not take things in order of time as they come on, but marſhal them according to greatneſs,

and not according to inſtance; not obſerving the good precept, *Quod nunc inſtat agamus.*

Another precept of this knowledge is not to embrace any matters which do occupy too great a quantity of time, but to have that ſounding in a man's ears, *Sed fugit interea, fugit irreparabile tempus:* and that is the cauſe why thoſe which take their courſe of riſing by profeſſions of Burden, as Lawyers, Orators, painful Divines, and the like, are not commonly ſo politic for their own fortunes, otherwiſe than in their ordinary way, becauſe they want time to learn particulars, to wait occaſions, and to deviſe plots.

Another precept of this knowledge is, to imitate nature, which doth nothing in vain; which ſurely a man may do if he do well interlace his buſineſs, and bend not his mind too much upon that which he principally intendeth. For a man ought in every particular action ſo to carry the motions of his mind, and ſo to have one thing under another, as if he cannot have that he ſeeketh in the beſt degree, yet to have it in a ſecond, or ſo in a third; and if he can have no part of that which he purpoſed, yet to turn the uſe of it to ſomewhat elſe; and if he cannot make any thing of it for the preſent, yet to make it as a ſeed of ſomewhat in time to come; and if he can contrive no effect or ſubſtance from it, yet to win ſome good opinion by it, or the like. So that he ſhould exact account of himſelf of every action, to reap ſomewhat, and not to ſtand amazed and confuſed if he fail of that

he chiefly meant: for nothing is more impolitic than to mind actions wholly one by one; for he that doth so, loseth infinite occasions which intervene, and are many times more proper and propitious for somewhat that he shall need afterwards, than for that which he urgeth for the present; and therefore men must be perfect in that rule, *Hæc oportet facere, et illa non omittere.*

Another precept of this knowledge is, not to engage a man's self peremptorily in any thing, though it seem not liable to accident; but ever to have a window to fly out at, or a way to retire: following the wisdom in the ancient fable of the two frogs, which consulted when their plash was dry whither they should go; and the one moved to go down into a pit, because it was not likely the water would dry there; but the other answered, *True, but if it do, how shall we get out again?*

Another precept of this knowledge is that ancient precept of *Bias*, construed not to any point of perfidiousness, but only to caution and moderation. *Et ama tanquam inimicus futurus, et odi tanquam amaturus;* for it utterly betrayeth all utility for men to embark themselves too far in unfortunate friendships, troublesome spleens, and childish and humorous envies or emulations.

But I continue this beyond the measure of an example; led, because I would not have such knowledges, which I note as *deficient*, to be thought things Imaginative or in the air, or an observation or two much made of, but things of bulk and mass,

whereof an end is hardlier made than a beginning. It must be likewise conceived, that in these points which I mention and set down, they are far from complete tractates of them, but only as small pieces for patterns. And lastly, no man, I suppose, will think that I mean fortunes are not obtained without all this ado; for I know they come tumbling into some men's laps; and a number obtain good fortunes by diligence in a plain way, little intermeddling, and keeping themselves from gross errors.

But as *Cicero*, when he setteth down an *Idea* of a perfect Orator, doth not mean that every pleader should be such; and so likewise, when a Prince or a *Courtier* hath been described by such as have handled those subjects, the mould hath used to be made according to the perfection of the Art, and not according to common practice: so I understand it, that it ought to be done in the description of a *Politic* man, I mean politic for his own fortune.

But it must be remembered all this while, that the precepts which we have set down are of that kind which may be counted and called *Bonæ Artes*. As for evil arts, if a man would set down for himself that principle of *Machiavel*, *that a man seek not to attain virtue itself, but the appearance only thereof; because the credit of virtue is a help, but the use of it is cumber:* or that other of his principles, *that he presuppose, that men are not fitly to be wrought otherwise but by fear; and therefore*

that he ſeek to have every man obnoxious, low, and in ſtrait, which the *Italians* call *ſeminar ſpine*, to ſow thorns; or that other principle, contained in the verſe which *Cicero* citeth, *Cadant amici, dummodo Inimici intercidant*, as the *Triumvirs*, which ſold, every one to other, the lives of their friends for the deaths of their enemies: or that other proteſtation of *L. Catilina*, to ſet on fire and trouble ſtates, to the end to fiſh in droumy waters, and to unwrap their fortunes, *Ego ſi quid in fortunis meis excitatum ſit incendium, id non aqua, ſed ruina reſtinguam:* or that other principle of *Lyſander*, *that children are to be deceived with comfits, and men with oaths:* and the like evil and corrupt poſitions, whereof, as in all things, there are more in number than of the good: certainly with theſe diſpenſations from the laws of charity and integrity, the preſſing of a man's fortune may be more haſty and compendious. But it is in life as it is in ways, the ſhorteſt way is commonly the fouleſt, and ſurely the fairer way is not much about.

But men, if they be in their own power, and do bear and ſuſtain themſelves, and be not carried away with a whirlwind or tempeſt of ambition, ought, in the purſuit of their own fortune, to ſet before their eyes not only that general Map of the world, *that all things are vanity and vexation of ſpirit*, but many other more particular Cards and directions: chiefly that,—that Being without well-being, is a curſe,—and the greater being the greater curſe; and that all virtue is moſt rewarded, and all

wickedneſs moſt puniſhed in itſelf: according as the *Poet* ſaith excellently:

> *Quæ vobis, quæ digna, viri, pro laudibus iſtis*
> *Præmia poſſe rear ſolvi? pulcherrima primum*
> *Dii* moreſque *dabunt veſtri.*

And ſo of the contrary. And, ſecondly, they ought to look up to the eternal providence and divine judgment, which often ſubverteth the wiſdom of evil plots and imaginations, according to that Scripture, *He hath conceived miſchief, and ſhall bring forth a vain thing.* And although men ſhould refrain themſelves from injury and evil arts, yet this inceſſant and Sabbathleſs purſuit of a man's fortune leaveth not the tribute which we owe to GOD of our time; who we ſee demandeth a tenth of our ſubſtance, and a ſeventh, which is more ſtrict, of our time: and it is to ſmall purpoſe to have an erected face towards heaven, and a perpetual grovelling ſpirit upon earth, eating duſt, as doth the ſerpent, *Atque affigit humo Divinæ particulam auræ.* And if any man flatter himſelf that he will employ his fortune well, though he ſhould obtain it ill, as was ſaid concerning *Auguſtus Cæſar*, and after of *Septimius Severus*, *that either they ſhould never have been born or elſe they ſhould never have died*, they did ſo much miſchief in the purſuit and aſcent of their greatneſs, and ſo much good when they were eſtabliſhed; yet theſe compenſations and ſatisfactions are good to be uſed, but never good to be purpoſed. And laſtly it is not amiſs for men, in their race, toward their fortune, to cool

themſelves a little with that conceit which is elegantly expreſſed by the Emperor *Charles* the Fifth, in his inſtructions to the King his ſon, *That fortune hath ſomewhat of the nature of a woman, that if ſhe be too much wooed, ſhe is the farther off.* But this laſt is but a remedy for thoſe whoſe Taſtes are corrupted: let men rather build upon that foundation which is as a corner-ſtone of Divinity and Philoſophy, wherein they join cloſe, namely, that ſame *Primum quærite.* For Divinity ſaith, *Primum quærite regnum Dei, et iſta omnia adjicientur vobis:* and Philoſophy ſaith, *Primum quærite bona animi, cætera aut aderunt, aut non oberunt.* And although the human foundation hath ſomewhat of the ſands, as we ſee in *M. Brutus*, when he brake forth into that ſpeech,

Te colui, Virtus, ut rem; at tu nomen inane es;

yet the divine foundation is upon the Rock. But this may ſerve for a Taſte of that knowledge which I noted as deficient.

Concerning Government, it is a part of knowledge ſecret and retired, in both theſe reſpects in which things are deemed ſecret; for ſome things are ſecret becauſe they are hard to know, and ſome becauſe they are not fit to utter. We ſee all governments are obſcure and inviſible:

Totamque infuſa per artus
Mens agitat molem, et magno ſe corpore miſcet.

Such is the deſcription of governments. We ſee the government of God over the world is hidden, inaſmuch as it ſeemeth to participate of much irre-

gularity and confuſion: the government of the Soul in moving the Body is inward and profound, and the paſſages thereof hardly to be reduced to demonſtration. Again, the wiſdom of Antiquity, (the ſhadows whereof are in the Poets,) in the deſcription of torments and pains, next unto the crime of Rebellion, which was the Giants' offence, doth deteſt the offence of futility, as in *Siſyphus* and *Tantalus*. But this was meant of particulars: nevertheleſs even unto the general rules and diſcourſes of policy and government there is due a reverent and reſerved handling.

But contrariwiſe, in the governors toward the governed, all things ought as far as the frailty of Man permitteth, to be manifeſt and revealed. For ſo it is expreſſed in the Scriptures touching the government of GOD, that this globe, which ſeemeth to us a dark and ſhady body, is in the view of GOD as Cryſtal: *Et in conſpectu ſedis tanquam mare vitreum ſimile Cryſtallo.* So unto Princes and States, eſpecially towards wiſe Senates and Councils, the natures and diſpoſitions of the people, their conditions and neceſſities, their factions and combinations, their animoſities and diſcontents, ought to be, in regard of the variety of their Intelligences, the wiſdom of their obſervations, and the height of their ſtation where they keep Sentinel, in great part clear and tranſparent. Wherefore, conſidering that I write to a King that is a maſter of this Science, and is ſo well aſſiſted, I think it decent to paſs over this part in ſilence, as willing to obtain the certificate which one of the ancient

Philoſophers aſpired unto; who being ſilent, when others contended to make demonſtration of their abilities by ſpeech, deſired it might be certified for his part, *that there was one that knew how to hold his peace.*

Notwithſtanding, for the more public part of Government, which is Laws, I think good to note only one deficiency; which is, that all thoſe which have written of Laws, have written either as Philoſophers or as Lawyers, and none as ſtateſmen. As for the Philoſophers, they make imaginary Laws for imaginary commonwealths; and their diſcourſes are as the ſtars, which give little light, becauſe they are ſo high. For the Lawyers, they write according to the States where they live, what is received Law, and not what ought to be Law: for the wiſdom of a Lawmaker is one, and of a Lawyer is another. For there are in Nature certain fountains of Juſtice, whence all Civil Laws are derived but as ſtreams: and like as waters do take tinctures and taſtes from the ſoils through which they run, ſo do civil Laws vary according to the Regions and governments where they are planted, though, they proceed from the ſame fountains. Again, the wiſdom of a Lawmaker conſiſteth not only in a platform of Juſtice, but in the application thereof; taking into conſideration by what means Laws may be made certain, and what are the cauſes and remedies of the doubtfulneſs and *incertainty* of Law; by what means Laws may be made apt and eaſy to be executed, and what are

the impediments and remedies in the *execution* of laws; what influence laws touching private right of *Meum* and *Tuum* have into the public ſtate, and how they may be made apt and *agreeable;* how laws are to be *penned* and *delivered*, whether in *Texts* or in *Acts*, *brief* or *large*, with *preambles*, or *without;* how they are to be *pruned* and *reformed* from time to time, and what is the beſt means to keep them from being too *vaſt in volumes*, or too full of *multiplicity* and *croſſneſs;* how they are to be expounded, when *upon cauſes emergent* and judicially diſcuſſed, and when upon *reſponſes* and *conferences* touching general points or queſtions; how they are to be *preſſed*, rigorouſly or tenderly; how they are to be *mitigated* by equity and good conſcience, and whether diſcretion and ſtrict Law are to be *mingled in the ſame Courts*, or *kept apart in ſeveral Courts;* again, how the practice, profeſſion, and erudition of Law is to be cenſured and governed; and many other points touching the adminiſtration, and, as I may term it, animation of Laws. Upon which I inſiſt the leſs, becauſe I purpoſe, if GOD give me leave, (having begun a work of this Nature in Aphoriſms,) to propound it hereafter, noting it in the mean time for deficient.

And for your Majeſty's Laws of *England*, I could ſay much of their dignity, and ſomewhat of their defect; but they cannot but excel the civil Laws in fitneſs for the government: for the civil Law was *non hos quæſitum munus in uſus;* it was not made for the Countries which it governeth:

hereof I ceaſe to ſpeak, becauſe I will not intermingle matter of Action with matter of general Learning.

THUS have I concluded this portion of learning touching *Civil knowledge;* and with Civil knowledge have concluded *Human Philoſophy;* and with Human Philoſophy, *Philoſophy* in *General.* And being now at ſome pauſe, looking back into that I have paſſed through, this writing ſeemeth to me, *ſi nunquam fallit Imago* (as far as a man can judge of his own work), not much better than that noiſe or ſound which Muſicians make while they are tuning their Inſtruments; which is nothing pleaſant to hear, but yet is a cauſe why the Muſic is ſweeter afterwards: ſo have I been content to tune the Inſtruments of the Muſes, that they may play that have better hands. And ſurely, when I ſet before me the condition of theſe times, in which learning hath made her third viſitation or circuit in all the qualities thereof—as the excellency and vivacity of the wits of this age; the noble helps and lights which we have by the travails of ancient writers; the Art of Printing, which communicateth Books to men of all fortunes; the openneſs of the world by Navigation, which hath diſcloſed multitudes of experiments, and a Maſs of Natural Hiſtory; the leiſure wherewith theſe times abound, not employing men ſo generally in civil buſineſs, as the States of *Græcia* did, in reſpect of their popularity, and

the State of *Rome*, in reſpect of the greatneſs of their Monarchy; the preſent diſpoſition of theſe times at this inſtant to peace; the conſumption of all that ever can be ſaid in controverſies of Religion, which have ſo much diverted men from other Sciences; the perfection of your Majeſty's learning, which as a *Phœnix* may call whole vollies of wits to follow you; and the inſeparable propriety of Time, which is ever more and more to diſcloſe truth—I cannot but be raiſed to this perſuaſion that this third period of time will far ſurpaſs that of the *Grecian* and *Roman* Learning: only if men will know their own ſtrength, and their own weakneſs both; and take one from the other, light of invention, and not fire of contradiction; and eſteem of the Inquiſition of truth as of an enterpriſe, and not as of a quality or ornament; and employ wit and magnificence to things of worth and excellency, and not to things vulgar and of popular eſtimation. As for my labours, if any man ſhall pleaſe himſelf or others in the reprehenſion of them, they ſhall make that ancient and patient requeſt, *Verbera, ſed audi*; let men reprehend them, ſo they obſerve and weigh them: for the Appeal is lawful, though it may be it ſhall not be needful, from the firſt cogitations of men to their ſecond, and from the nearer times to the times farther off. Now let us come to that learning, which both the former times were not ſo bleſſed as to know, *Sacred and inſpired Divinity*, the Sabbath and port of all men's labours and peregrinations.

THE prerogative of God extendeth as well to the reaſon as to the will of Man; ſo that as we are to obey his Law, though we find a reluctation in our will, ſo we are to believe his word, though we find a reluctation in our reaſon. For if we believe only that which is agreeable to our ſenſe, we give conſent to the matter, and not to the Author; which is no more than we would do towards a ſuſpected and diſcredited witneſs; but that faith which was accounted to *Abraham* for righteouſneſs was of ſuch a point as whereat *Sarah* laughed, who therein was an Image of Natural Reaſon.

Howbeit, if we will truly conſider it, more worthy it is to believe than to know as we now know. For in knowledge man's mind ſuffereth from ſenſe; but in belief it ſuffereth from Spirit, ſuch one as it holdeth for more authoriſed than itſelf, and ſo ſuffereth from the worthier Agent. Otherwiſe it is of the ſtate of man glorified; for then faith ſhall ceaſe, and we ſhall know as we are known.

Wherefore we conclude that ſacred Theology, (which in our Idiom we call Divinity,) is grounded only upon the word and oracle of God, and not upon the light of nature: for it is written *Cœli enarrant gloriam Dei;* but it is not written, *Cœli enarrant voluntatem Dei:* but of that it is ſaid, *Ad legem et teſtimonium: ſi non fecerint ſecundum verbum iſtud, &c.* This holdeth not only in thoſe

points of faith which concern the great myſteries of the Deity, of the Creation, of the Redemption, but likewiſe thoſe which concern the law Moral truly interpreted: *Love your Enemies: do good to them that hate you; be like to your heavenly Father, that ſuffereth his rain to fall upon the Juſt and Unjuſt.* To this it ought to be applauded, *Nec vox hominem ſonat:* it is a voice beyond the light of Nature. So we ſee the heathen Poets, when they fall upon a libertine paſſion, do ſtill expoſtulate with laws and Moralities, as if they were oppoſite and malignant to Nature; *Et quod natura remittit, invida Jura negant.* So ſaid *Dendamis* the *Indian* unto *Alexander's* meſſengers, *That he had heard ſomewhat of Pythagoras, and ſome other of the wiſe men of Græcia, and that he held them for excellent Men: but that they had a fault, which was that they had in too great reverence and veneration a thing they called Law and Manners.* So it muſt be confeſſed, that a great part of the Law Moral is of that perfection, whereunto the light of Nature cannot aſpire: how then is it that man is ſaid to have, by the light and Law of Nature, ſome Notions and conceits of virtue and vice, juſtice and wrong, good and evil? Thus, becauſe the light of Nature is uſed in two ſeveral ſenſes; the one, that which ſpringeth from Reaſon, Senſe, Induction, Argument, according to the Laws of heaven and earth; the other, that which is imprinted upon the ſpirit of Man by an inward Inſtinct, according to the Law of conſcience, which

is a ſparkle of the purity of his firſt Eſtate: in which latter ſenſe only he is participant of ſome light and diſcerning touching the perfection of the Moral Law: but how? ſufficient to check the vice, but not to inform the duty. So then the doctrine of Religion, as well Moral as Myſtical, is not to be attained but by inſpiration and revelation from GOD.

The uſe, notwithſtanding, of Reaſon in ſpiritual things, and the latitude thereof, is very great and general: for it is not for nothing that the Apoſtle calleth Religion *our reaſonable ſervice of* GOD; inſomuch as the very Ceremonies and Figures of the old Law were full of reaſon and ſignification, much more than the ceremonies of Idolatry and Magic, that are full of *Non-ſignificants* and *Surd Characters*. But moſt eſpecially the Chriſtian Faith, as in all things, ſo in this deſerveth to be highly magnified; holding and preſerving the golden Mediocrity in this point between the Law of the *Heathen* and the Law of *Mahomet*, which have embraced the two extremes. For the Religion of the *Heathen* had no conſtant belief or confeſſion, but left all to the liberty of argument; and the Religion of *Mahomet*, on the other ſide, interdicteth argument altogether: the one having the very face of Error, and the other of Impoſture: whereas the Faith doth both admit and reject Diſputation with difference.

The uſe of Human Reaſon in Religion is of two ſorts: the former, in the conception and apprehen-

ſion of the Myſteries of GOD to us revealed; the other, in the inferring and deriving of Doctrine and direction thereupon. The former extendeth to the Myſteries themſelves; but how? by way of Illuſtration, and not by way of argument: the latter conſiſteth indeed of Probation and Argument. In the former, we ſee, GOD vouchſafeth to deſcend to our capacity, in the expreſſing of his myſteries in ſort as may be ſenſible unto us; and doth graft his Revelations and holy doctrine upon the Notions of our reaſon, and applieth his Inſpirations to open our underſtanding, as the form of the key to the ward of the lock: for the latter, there is allowed us a uſe of Reaſon and argument, ſecondary and reſpective, although not original and abſolute. For after the Articles and principles of Religion are placed and exempted from examination of reaſon, it is then permitted unto us to make derivations and inferences from, and according to the Analogy of them, for our better direction. In Nature this holdeth not; for both the principles are examinable by Induction, though not by a *Medium* or *Syllogiſm;* and beſides, thoſe principles or firſt poſitions have no diſcordance with that reaſon which draweth down and deduceth the inferior poſitions. But yet it holdeth not in Religion alone, but in many knowledges, both of greater and ſmaller Nature, namely, wherein there are not only *Poſita* but *Placita;* for in ſuch there can be no uſe of abſolute reaſon: we ſee it familiarly in games of wit, as Cheſs, or the like: the Draughts and firſt Laws

of the Game are positive, but how? merely *ad placitum*, and not examinable by reason; but then how to direct our play thereupon with best advantage to win the game, is artificial and rational. So in Human Laws, there be many grounds and Maxims which are *Placita juris*, *Positive* upon authority, and not upon reason, and therefore not to be disputed: but what is most just, not absolutely but relatively, and according to those Maxims, that affordeth a long field of disputation. Such therefore is that secondary reason, which hath place in divinity, which is grounded upon the *Placets* of God.

Here therefore I note this deficiency, that there hath not been, to my understanding, sufficiently inquired and handled *the true limits and use of reason in spiritual things*, as a kind of divine Dialectic: which for that it is not done, it seemeth to me a thing usual, by pretext of true conceiving that which is revealed, to search and mine into that which is not revealed; and by pretext of enucleating inferences and contradictories, to examine that which is positive: the one sort falling into the Error of *Nicodemus*, demanding to have things made more sensible than it pleaseth God to reveal them, *Quomodo possit homo nasci cum sit senex?* the other sort into the Error of the Disciples, which were scandalized at a show of contradiction, *Quid est hoc quod dicit nobis? Modicum, et non videbitis me; et iterum, modicum, et videbetis me*, &c.

Upon this I have insisted the more, in regard of

the great and bleſſed uſe thereof; for this point, well laboured and defined of, would in my judgment be an *Opiate* to ſtay and bridle not only the vanity of curious ſpeculations, wherewith the ſchools labour, but the fury of controverſies, wherewith the church laboureth. For it cannot but open men's eyes, to ſee that many controverſies do merely pertain to that which is either not revealed, or poſitive; and that many others do grow upon weak and obſcure Inferences or derivations: which latter ſort, if men would revive the bleſſed ſtile of that great Doctor of the Gentiles, would be carried thus, *Ego, non Dominus;* and again, *Secundum conſilium meum*, in Opinions and counſels, and not in poſitions and oppoſitions. But Men are now over-ready to uſurp the ſtile, *Non Ego, ſed Dominus;* and not ſo only, but to bind it with the thunder and denunciation of *Curſes* and *Anathemas*, to the terror of thoſe which have not ſufficiently learned out of *Solomon*, that *the cauſeleſs Curſe ſhall not come.*

Divinity hath two principal parts; the matter informed or revealed, and the nature of the Information or Revelation: and with the latter we will begin, becauſe it hath moſt coherence with that which we have now laſt handled. The nature of the information conſiſteth of three branches; the limits of the information, the ſufficiency of the information, and the acquiring or obtaining the information. Unto the limits of the information belong theſe conſiderations; how far forth particular

perſons continue to be inſpired; how far forth the Church is inſpired; how far forth reaſon may be uſed: the laſt point whereof I have noted as deficient. Unto the ſufficiency of the information belong two conſiderations; what points of religion are fundamental, and what perfective, being matter of further building and perfection upon one and the ſame foundation; and again, how the gradations of light, according to the diſpenſation of times, are material to the ſufficiency of belief.

Here again I may rather give it in advice, than note it as deficient, that the points fundamental, and the points of farther perfection only, ought to be with piety and wiſdom diſtinguiſhed: a ſubject tending to much like end as that I noted before; for as that other were like to abate the number of controverſies, ſo this is likely to abate the heat of many of them. We ſee *Moſes* when he ſaw the *Iſraelite* and the *Ægyptian* fight, he did not ſay, *Why ſtrive you?* but drew his ſword and ſlew the *Ægyptian:* but when he ſaw the two *Iſraelites* fight, he ſaid, *You are brethren, why ſtrive you?* If the point of doctrine be an *Ægyptian*, it muſt be ſlain by the ſword of the Spirit, and not reconciled; but if it be an *Iſraelite*, though in the wrong, then, *Why ſtrive you?* We ſee of the fundamental points, our Saviour penneth the league thus, *He that is not with us, is againſt us;* but of points not fundamental, thus, *He that is not againſt us, is with us.* So we ſee the Coat of our Saviour was entire without ſeam, and ſo is the Doctrine of the Scrip-

tures in itſelf; but the garment of the Church was of divers colours, and yet not divided: we ſee the chaff may and ought to be ſevered from the corn in the Ear, but the Tares may not be pulled up from the corn in the field. So as it is a thing of great uſe well to define what, and of what latitude thoſe points are, which do make men merely aliens and diſincorporate from the Church of GOD.

For the obtaining of the information, it reſteth upon the true and ſound Interpretation of the Scriptures, which are the fountains of the water of life. The Interpretations of the Scriptures are of two ſorts; Methodical, and Solute or at large. For this divine water, which excelleth ſo much that of *Jacob's* Well, is drawn forth much in the ſame kind as Natural Water uſeth to be out of Wells and Fountains; either it is firſt forced up into a Ciſtern, and from thence fetched and derived for uſe; or elſe it is drawn and received in Buckets and Veſſels immediately where it ſpringeth: the former ſort whereof, though it ſeem to be the more ready, yet in my judgment is more ſubject to corrupt. This is that Method which hath exhibited unto us the ſcholaſtical divinity; whereby divinity hath been reduced into an Art, as into a Ciſtern, and the ſtreams of doctrine or poſitions fetched and derived from thence.

In this Men have ſought three things, a ſummary brevity, a compacted ſtrength, and a complete perfection; whereof the two firſt they fail to find, and

the laſt they ought not to ſeek. For as to brevity, we ſee, in all ſummary Methods, while men purpoſe to abridge, they give cauſe to dilate. For the ſum or abridgment by contraction becometh obſcure; the obſcurity requireth expoſition, and the expoſition is deduced into large commentaries, or into common places and titles, which grow to be more vaſt than the original writings, whence the ſum was at firſt extracted. So, we ſee, the volumes of the ſchoolmen are greater much than the firſt writings of the fathers, whence the Maſter of the ſentences made his ſum or collection. So, in like manner, the volumes of the modern Doctors of the Civil Law exceed thoſe of the ancient Juriſconſults, of which *Tribonian* compileth the Digeſt. So as this courſe of ſums and commentaries is that which doth infallibly make the body of Sciences more immenſe in quantity, and more baſe in ſubſtance.

And for ſtrength, it is true that knowledges reduced into exact Methods have a ſhew of ſtrength, in that each part ſeemeth to ſupport and ſuſtain the other; but this is more ſatisfactory than ſubſtantial: like unto buildings which ſtand by Architecture and compaction, which are more ſubject to ruin than thoſe which are built more ſtrong in their ſeveral parts, though leſs compacted. But it is plain that the more you recede from your grounds, the weaker do you conclude: and as in nature, the more you remove yourſelf from particulars, the greater peril of Error you do incur; ſo

much more in Divinity, the more you recede from the Scriptures by inferences and conſequences, the more weak and dilute are your poſitions.

And as for perfection or completeneſs in Divinity, it is not to be ſought; which makes this courſe of Artificial divinity the more ſuſpect. For he that will reduce a knowledge into an Art, will make it round and uniform: but in Divinity many things muſt be left abrupt, and concluded with this: *O altitudo Sapientiæ et ſcientiæ Dei! quam incomprehenſibilia ſunt Judicia ejus, et non inveſtigabiles viæ ejus!* So again the Apoſtle ſaith, *Ex parte ſcimus:* and to have the form of a total, where there is but matter for a part, cannot be without ſupplies by ſuppoſition and preſumption. And therefore I conclude, that the true uſe of theſe Sums and Methods hath place in Inſtitutions or Introductions preparatory unto knowledge: but in them, or by deducement from them, to handle the main body and ſubſtance of a knowledge, is in all Sciences prejudicial, and in Divinity dangerous.

As to the Interpretation of the Scriptures ſolute and at large, there have been divers kinds introduced and deviſed; ſome of them rather curious and unſafe, than ſober and warranted. Notwithſtanding, thus much muſt be confeſſed, that the Scriptures being given by inſpiration, and not by human reaſon, do differ from all other books in the Author: which, by conſequence, doth draw on ſome difference to be uſed by the Expoſitor.

For the Inditer of them did know four things which no man attains to know; which are, the myſteries of the kingdom of glory, the perfection of the Laws of Nature, the ſecrets of the heart of Man, and the future ſucceſſion of all ages. For as to the firſt, it is ſaid, *He that preſſeth into the light, ſhall be oppreſſed of the Glory.* And again, *No man ſhall ſee my face and live.* To the ſecond, *When he prepared the heavens I was preſent, when by law and compaſs he incloſed the deep.* To the third, *Neither was it needful that any ſhould bear witneſs to him of Man, for he knew well what was in Man.* And to the laſt, *From the beginning are known to the Lord all his works.*

From the former of theſe two have been drawn certain ſenſes and expoſitions of Scriptures, which had need be contained within the bounds of ſobriety; the one *Anagogical*, and the other *Philoſophical.* But as to the former, Man is not to prevent his time: *Videmus nunc per ſpeculum in Ænigmate, tunc autem facie ad faciem:* wherein, nevertheleſs, there ſeemeth to be a liberty granted, as far forth as the poliſhing of this glaſs, or ſome moderate explication to this *Ænigma.* But to preſs too far into it, cannot but cauſe a diſſolution and overthrow of the ſpirit of man. For in the body there are three degrees of that we receive into it, *Aliment*, *Medicine*, and *Poiſon;* whereof *Aliment* is that which the Nature of man can perfectly alter and overcome: *Medicine* is that which is partly converted by Nature, and partly converteth na-

ture; and *Poiſon* is that which worketh wholly upon Nature, without that, that nature can in any part work upon it: ſo in the mind, whatſoever knowledge reaſon cannot at all work upon and convert, is a mere intoxication, and endangereth a diſſolution of the mind and underſtanding.

But for the latter, it hath been extremely ſet on foot of late time by the School of *Paracelſus*, and ſome others, that have pretended to find the truth of all natural Philoſophy in the Scriptures; ſcandalizing and traducing all other Philoſophy as Heatheniſh and Profane. But there is no ſuch enmity between God's word and his works; neither do they give honour to the Scriptures, as they ſuppoſe, but much imbaſe them. For to ſeek heaven and earth in the word of God, (whereof it is ſaid, *Heaven and Earth ſhall paſs, but my word ſhall not paſs*, is to ſeek temporary things amongſt eternal: and as to ſeek Divinity in Philoſophy is to ſeek the living amongſt the dead, ſo to ſeek Philoſophy in Divinity is to ſeek the dead amongſt the living: neither are the *Pots* or *Lavers*, whoſe place was in the outward part of the Temple, to be ſought in the holieſt place of all, where the Ark of the teſtimony was ſeated. And again, the ſcope or purpoſe of the Spirit of God is not to expreſs matters of Nature in the Scriptures, otherwiſe than in paſſage, and for application to man's capacity, and to matters Moral or Divine. And it is a true Rule, *Auctoris aliud agentis parva auctoritas;* for it were a ſtrange concluſion, if a

man ſhould uſe a ſimilitude for ornament or illuſtration ſake, borrowed from Nature or hiſtory according to vulgar conceit, as of a *Baſiliſk*, an *Unicorn*, a *Centaur*, a *Briareus*, an *Hydra*, or the like, that therefore he muſt needs be thought to affirm the matter thereof poſitively to be true. To conclude, therefore, theſe two Interpretations, the one by reduction or Ænigmatical, the other Philoſophical or Phyſical, which have been received and purſued in imitation of the *Rabbins* and *Cabaliſts*, are to be confined with a *Noli altum ſapere, ſed time.*

But the two latter points, known to GOD and unknown to Man, *touching the ſecrets of the heart, and the ſucceſſions of time*, do make a juſt and ſound difference between the manner of the expoſition of the Scriptures and all other books. For it is an excellent obſervation which hath been made upon the anſwers of our Saviour CHRIST to many of the queſtions which were propounded to him, how that they are impertinent to the ſtate of the queſtion demanded; the reaſon whereof is, becauſe, not being like man, which knows man's thoughts by his words, but knowing man's thoughts immediately, he never anſwered their words, but their thoughts: much in the like manner it is with the Scriptures, which being written to the thoughts of men, and to the ſucceſſion of all ages, with a foreſight of all hereſies, contradictions, differing eſtates of the Church, yea and particularly of the elect, are not to be interpreted only according to

the latitude of the proper ſenſe of the place, and reſpectively towards that preſent occaſion whereupon the words were uttered, or in preciſe congruity or contexture with the words before or after, or in contemplation of the principal ſcope of the place; but have in themſelves, not only totally or collectively, but diſtributively in clauſes and words, infinite ſprings and ſtreams of doctrine to water the Church in every part. And therefore as the literal ſenſe is, as it were, the main ſtream or River; ſo the Moral ſenſe chiefly, and ſometimes the *Allegorical* or *Typical*, are they whereof the Church hath moſt uſe; not that I wiſh men to be bold in *Allegories*, or *indulgent* or light in Alluſions: but that I do much condemn that Interpretation of the Scripture which is only after the manner as Men uſe to interpret a profane book.

In this part, touching the expoſition of the Scriptures, I can report no deficience; but by way of remembrance this I will add: in peruſing books of Divinity, I find many Books of controverſies, and many of common places and treaties, a maſs of poſitive Divinity, as it is made an Art: a number of Sermons and Lectures, and many prolix commentaries upon the Scriptures, with harmonies and concordances: but that form of writing in Divinity which in my judgment is of all others moſt rich and precious, is poſitive Divinity, collected upon particular Texts of Scriptures in brief obſervations; not dilated into common places, not chaſing after controverſies, not reduced into Me-

thod of Art; a thing abounding in Sermons, which will vaniſh, but defective in books which will remain; and a thing wherein this age excelleth. For I am perſuaded, (and I may ſpeak it with an *Abſit invidia verbo*, and no ways in derogation of Antiquity, but as in a good emulation between the vine and the olive, that if the choice and beſt of thoſe obſervations upon Texts of Scriptures, which have been made diſperſedly in Sermons within this your Majeſty's Iſland of *Britain* by the ſpace of theſe forty years and more, leaving out the largeneſs of exhortations and applications thereupon, had been ſet down in a continuance, it had been the beſt work in Divinity which had been written ſince the Apoſtles' times.

The matter informed by Divinity is of two kinds; matter of belief and truth of opinion, and matter of ſervice and adoration; which is alſo judged and directed by the former: the one being as the internal ſoul of Religion, and the other as the external body thereof. And therefore the heathen Religion was not only a worſhip of idols, but the whole Religion was an Idol in itſelf; for it had no ſoul, that is, no certainty of belief or confeſſion: as a man may well think, conſidering the chief Doctors of their Church were the Poets: and the reaſon was, becauſe the heathen Gods were no Jealous Gods, but were glad to be admitted into part, as they had reaſon. Neither did they reſpect the pureneſs of heart, ſo they might have external honour and rites.

But out of theſe two do reſult and iſſue four main branches of Divinity; *Faith*, *Manners*, *Liturgy*, and *Government*. *Faith* containeth the Doctrine of the Nature of GOD, of the attributes of GOD, and of the works of GOD. The nature of GOD conſiſteth of three perſons in unity of Godhead. The attributes of GOD are either common to the Deity, or reſpective to the perſons. The works of GOD ſummary are two, that of the *Creation* and that of the *Redemption;* and both theſe works, as in Total they appertain to the unity of the Godhead, ſo in their parts they refer to the three perſons: that of the Creation, in the Maſs of the Matter, to the Father; in the diſpoſition of the form, to the Son; and in the continuance and conſervation of the being, to the Holy Spirit: ſo that of the Redemption, in the election and counſel, to the Father; in the whole Act and conſummation to the Son; and in the application, to the Holy Spirit; for by the Holy Ghoſt was CHRIST conceived in fleſh, and by the Holy Ghoſt are the elect regenerate in ſpirit. This work likewiſe we conſider either effectually, in the Elect; or privately in the reprobate; or according to appearance, in the viſible Church.

For Manners, the Doctrine thereof is contained in the law, which diſcloſeth ſin. The law itſelf is divided, according to the edition thereof, into the law of Nature, the law Moral, and the law Poſitive; and according to the ſtile, into Negative and Affirmative, Prohibitions and Commandments.

Sin, in the matter and ſubject thereof, is divided according to the Commandments; in the form thereof, it referreth to the three perſons in Deity: Sins of infirmity againſt the Father, whoſe more ſpecial attribute is Power; Sins of Ignorance againſt the Son, whoſe attribute is Wiſdom; and ſins of Malice againſt the Holy Ghoſt, whoſe attribute is Grace or Love. In the motions of it, it either moveth to the right hand or to the left; either to blind devotion, or to profane and libertine tranſgreſſion; either in impoſing reſtraint where GOD granteth liberty, or in taking liberty where GOD impoſeth reſtraint. In the degrees and progreſs of it, it divideth itſelf into thought, word, or Act. And in this part I commend much the deducing of the Law of GOD to caſes of conſcience; for that I take indeed to be a breaking, and not exhibiting whole of the bread of life. But that which quickeneth both theſe Doctrines of faith and Manners, is the elevation and conſent of the heart; whereunto appertain books of exhortation, holy meditation, Chriſtian reſolution, and the like.

For the Liturgy or ſervice, it conſiſteth of the reciprocal Acts between GOD and Man; which, on the part of GOD, are the Preaching of the word, and the Sacraments, which are ſeals to the covenant, or as the viſible word; and on the part of Man, Invocation of the name of GOD; and under the Law, Sacrifices; which were as viſible prayers or confeſſions: but now the adoration being *in ſpiritu et veritate*, there remaineth only *vituli*

labiorum; although the uſe of holy vows of thankfulneſs and retribution may be accounted alſo as ſealed petitions.

And for the Government of the Church, it conſiſteth of the patrimony of the Church, the franchiſes of the Church, and the offices and juriſdictions of the Church, and the Laws of the Church directing the whole; all which have two conſiderations, the one in themſelves, the other how they ſtand compatible and agreeable to the Civil Eſtate.

This matter of Divinity is handled either in form of inſtruction of truth, or in form of confutation of falſehood. The declinations from Religion, beſides the privative, which is Atheiſm, and the Branches thereof, are three; *Hereſies*, *Idolatry*, and *Witchcraft; Hereſies*, when we ſerve the true GOD with a falſe worſhip; *Idolatry*, when we worſhip falſe Gods, ſuppoſing them to be true: and *Witchcraft*, when we adore falſe Gods, knowing them to be wicked and falſe: for ſo your Majeſty doth excellently well obſerve, that *Witchcraft* is the height of *Idolatry*. And yet we ſee though theſe be true degrees, *Samuel* teacheth us that they are all of a nature, when there is once a receding from the word of GOD; for ſo he ſaith, *Quaſi Peccatum ariolandi eſt repugnare, et quaſi ſcelus Idololatriæ nolle acquieſcere.*

Theſe things I have paſſed over ſo briefly becauſe I can report no deficiency concerning them: for I can find no ſpace or ground that lieth vacant

and unſown in the matter of Divinity; ſo diligent have men been, either in ſowing of good ſeed, or in ſowing of Tares.

THUS have I made as it were a ſmall Globe of the Intellectual World, as truly and faithfully as I could diſcover; with a note and deſcription of thoſe parts which ſeem to me not conſtantly occupate, or not well converted by the labour of Man. In which, if I have in any point receded from that which is commonly received, it hath been with a purpoſe of proceeding in *melius*, and not in *aliud;* a mind of amendment and proficience, and not of change and difference. For I could not be true and conſtant to the argument I handle, if I were not willing to go beyond others; but yet not more willing than to have others go beyond me again: which may the better appear by this, that I have propounded my opinions naked and unarmed, not ſeeking to preoccupate the liberty of men's judgments by confutations. For in any thing which is well ſet down, I am in good hope, that if the firſt reading move an objection, the ſecond reading will make an anſwer. And in thoſe things wherein I have erred, I am ſure I have not prejudiced the right by litigious arguments; which certainly have this contrary effect and operation, that they add authority to error, and deſtroy the authority of that which is well invented: for queſtion is an honour and preferment to falſehood, as on the other ſide it

is a repulſe to truth. But the errors I claim and challenge to myſelf as mine own: the good, if any be, is due *Tanquam adeps ſacrificii*, to be incenſed to the honour, firſt of the Divine Majeſty, and next of your Majeſty, to whom on earth I am moſt bounden.

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